					DEPARTMENT	T OF NAT	URAL RESC				AMENI	FC DED REPOR	RM 3	
		AF	PPLICATION FO	R PERM	IT TO DRILL					1. WELL NAME and N	JMBER NBU 102	2-5F4BS		
2. TYPE O	F WORK	DRILL NEW WELL	REENTER	P&A WELL	. DEEPEN	WELL .)			3. FIELD OR WILDCA	r Natural	.BUTTES		
4. TYPE O	F WELL									5. UNIT or COMMUNI		AGREEM	ENT NAM	1E
6. NAME (DRILL NEW WELL Gas Well Coalbed Methane Well: NO KERR-MCGEE OIL & GAS ONSHORE, L.P. RESS OF OPERATOR RESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217 IERAL LEASE NUMBER RAL, INDIAN, OR STATE) UTU-01195 ME OF SURFACE OWNER (if box 12 = 'fee') DRESS OF SURFACE OWNER (if box 12 = 'fee') DIAN ALLOTTEE OR TRIBE NAME 11. INTEND TO COMMINGLE PRODUCTION FI MULTIPLE FORMATIONS YES (Submit Commingling Application) DCATION OF WELL FOOTAGES QTR-QTR TITION AT SURFACE 1261 FNL 2602 FWL NENW 141 Depth 1503 25. DISTANCE TO NEAREST LEASE LINE (Feet 503) EVATION - GROUND LEVEL 5184 WYB000291 Hole, Casing, and Cement Inform g Hole Size Casing Size Length Weight Grade & Thread Max Mud ff 11 8.625 0 - 2550 28.0 J-55 LT&C 0.2									7. OPERATOR PHONE				
8. ADDRE	DEEPEN WELL Gas Well Coalbed Methane Well: NO ME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P. DRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217 NERAL LEASE NUMBER RAL, INDIAN, OR STATE) UTU-01195 INDIAN OR STATE ODRESS OF SURFACE OWNER (if box 12 = 'fee') DIAN ALLOTTEE OR TRIBE NAME K 12 = 'INDIAN') DIAN ALLOTTEE OR TRIBE NAME K 12 = 'INDIAN') OCATION OF WELL FOOTAGES QTR-QTR SECTION AT SURFACE 1261 FNL 2602 FWL NENW 5 OUDITY UINTAH DIAN DEEPEN WELL Gas Well Coalbed Methane Well: NO MEEPEN WELL II. MINERAL OWNERSHIP FEDERAL III. MINERAL O									9. OPERATOR E-MAII				
10. MINER	AL LEASE NUN	P.O. Box 173779	SHIP				julie.ja 12. SURFACE OWNER		anadarko	.com				
		UTU-01195		FED	ERAL INC	DIAN 🔵	STATE () FEE(FEDERAL INDIAN STATE FEE				
13. NAME	OF SURFACE	OWNER (if box 12	= 'fee')							14. SURFACE OWNER PHONE (if box 12 = 'fee')				
15. ADDR	ESS OF SURFA	CE OWNER (if box	12 = 'fee')							16. SURFACE OWNE	R E-MAIL	(if box 12	! = 'fee')	
		R TRIBE NAME								19. SLANT				
(II box 12	= INDIAN)			YES	(Submit C	Commingli	ing Applicati	on) NO 🤅		VERTICAL DIRECTIONAL HORIZONT			ral 🔵	
20. LOC/	ATION OF WELL	-		FOOTAGE	ES .	QTF	R-QTR	SECT	ION	TOWNSHIP	R/	ANGE	МЕ	ERIDIAN
LOCATIO	N AT SURFACI		1261	FNL 260	2 FWL	NE	ENW	5		10.0 S	22	2.0 E		S
Top of U	ppermost Prod	lucing Zone	2102	FNL 214	3 FWL	SE	ENW	5		10.0 S	22	2.0 E		S
			2102	FNL 214	NL 2143 FWL SENW		5	10.0 S 2		22	22.0 E S			
21. COUN	ITY	UINTAH		22. DIS	STANCE TO NEA			eet)		23. NUMBER OF ACR	ES IN DRI 57		IT	
						or Compl	leted)	POOL		26. PROPOSED DEPT		TVD: 103	17	
27. ELEV	ATION - GROUN			28. BC	OND NUMBER					29. SOURCE OF DRIL WATER RIGHTS APPR	OVAL NU	MBER IF A	PPLICAB	LE
		5184			Hole Casing			rmation			43-8	1490		
String	Hole Size	Casing Size	Length	Weight						Cement		Sacks	Yield	Weight
Surf	11	8.625	0 - 2550	28.0	J-55 LT	Г&С	0.	.2		Type V		180	1.15	15.8
Drad	7.075	4.5	0 10117	11.6	HCD 440	1.70.0	12	-	Dro	Class G	n = 4 h	270	1.15	15.8
Prod	7.875	4.5	0 - 10417	11.0	HCP-110	LIAC	12	.5	Premium Lite High Strength 50/50 Poz		ngın	310 1510	1.31	12.0
					Δ	TTACH	MENTS			00,001.02		1010		
						TIACIII	WILITIO							
	VEF	RIFY THE FOLLO	WING ARE ATT	ACHED I	IN ACCORDAN	ICE WITI	H THE UTA	AH OIL AN	D GAS	CONSERVATION G	ENERA	L RULES		
✓ w	ELL PLAT OR M	AP PREPARED BY	LICENSED SURVE	YOR OR E	NGINEER		СОМ	PLETE DRII	LING P	_AN				
AF	FIDAVIT OF STA	ATUS OF SURFACE	OWNER AGREEM	ENT (IF FE	EE SURFACE)		FORM	1 5. IF OPER	RATOR IS	S OTHER THAN THE LI	EASE OW	NER		
I DII	RECTIONAL SU	RVEY PLAN (IF DIR	ECTIONALLY OR	HORIZON	TALLY DRILLED)	торо	GRAPHICA	L MAP					
NAME G	na Becker			TITLE	Regulatory Analy	rst II			PHON	E 720 929-6086				
SIGNATU	IRE			DATE	02/06/2013				EMAIL	. gina.becker@anadark	o.com			
	BER ASSIGNED 047535790			APPRO	OVAL				Bro	ocyill				
				1					Pern	nit Manager				

NBU 1022-5C Pad Drilling Program

1 of 6

Kerr-McGee Oil & Gas Onshore, L.P.

NBU 1022-5F4BS

Surface: 1261 FNL / 2602 FWL NENW BHL: 2102 FNL / 2143 FWL SENW

Section 5 T10S R22E

Unitah County, Utah Mineral Lease: UTU-01195

ONSHORE ORDER NO. 1

DRILLING PROGRAM

2.a <u>Estimated Tops of Important Geologic Markers</u>: <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations</u>:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,290'	
Birds Nest	1,615'	Water
Mahogany	2,103'	Water
Wasatch	4,511'	Gas
Mesaverde	7,058'	Gas
Sego	9,193'	Gas
Castlegate	9,274'	Gas
Blackhawk	9,717'	Gas
TVD =	10,317'	
TD =	10,417'	

2.b Kerr McGee Oil & Gas Onshore LP (Kerr McGee) may elect to drill to (i) the Blackhawk formation (part of the Mesaverde Group), (ii) to a shallower depth within the Mesaverde Group, or (iii) to the Wasatch Formation. If Kerr McGee drills to the Blackhawk formation, please refer to Blackhawk as the bottom formation. The attached Blackhawk Drilling Program includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the deeper formation.

If Kerr-McGee drills to a shallower depth in the Mesaverde Group or to the Wasatch Formation, please refer to the attached Wasatch/Mesaverde Drilling Program which includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the shallower formations.

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the Standard Operating Practices on file with the BLM Vernal Field Office.

NBU 1022-5C Pad Drilling Program 2 of 6

4. <u>Proposed Casing & Cementing Program:</u>

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

6. <u>Evaluation Program</u>:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

7. **Abnormal Conditions:**

7.a Blackhawk (Part of Mesaverde Group)

Maximum anticipated bottom hole pressure calculated at 6,603 psi (0.64 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,319 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

7.b Wasach Formation/Mesaverde Group

Maximum anticipated bottom hole pressure calculated at 9193' TVD, approximately equals 5,608 psi (0.61 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,610 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the Standard Operating Practices on file with the BLM Vernal Field Office.

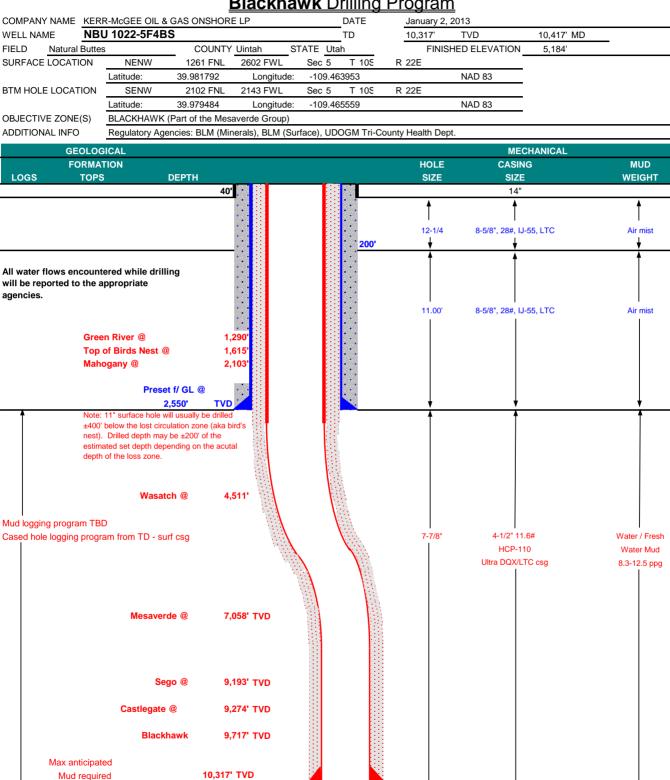
10. Other Information:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

1/2/2013



KERR-McGEE OIL & GAS ONSHORE LP Blackhawk Drilling Program



TD@

12.5 ppg

10,417' MD



KERR-McGEE OIL & GAS ONSHORE LP Blackhawk Drilling Program

CASING PROGRAM

CONDUCTOR

SURFACE PRODUCTION

<u> </u>								DEGIGITI	rtoronto	
									LTC	DQX
SIZE	INT	ERVA	L	WT.	GR.	CPLG.	BURST	COLLAPSE	TE	NSION
14"	()-40'								
							3,390	1,880	348,000	N/A
8-5/8"	0	to	2,550	28.00	IJ-55	LTC	2.11	1.58	5.57	N/A
							10,690	8,650	279,000	367,174
4-1/2"	0	to	5,000	11.60	HCP-110	DQX	1.19	1.29		3.76
4-1/2"	5,000	to	10,417'	11.60	HCP-110	LTC	1.19	1.29	5.49	

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1		+ 0.25 pps flocele				
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
		+ 2% CaCl + 0.25 pps flocele				
SURFACE		NOTE: If well will circulate water to s	surface, option	on 2 will be	utilized	
Option 2 LEAD	2,050'	Premium cmt + 16% Gel + 10 pps gilsonite	250	35%	12.00	2.86
		+ 0.25 pps Flocele + 3% salt BWOC + GR 3 pps				
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
		+ 0.25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION LEAD	4,007'	Premium Lite II +0.25 pps celloflake + .4% FL-52	310	35%	12.00	3.38
		+ .3% R-3 + .5 lbs/sk Kol-Seal + 6%Bentonite II +				
		1.2% Sodium Metasilicate + .05 lbs/sk Static Free				
TAIL	6,410'	50/50 Poz/G + 10% salt + .05 lbs/sk Static Free	1,510	35%	14.30	1.31
		+ 1.2% Sodium Metasilicate + .5 % EC-1				
		+.002 gps FP-6L + 2% Bentonite II				

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION

Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. I centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11* 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

IF extreme mud losses are observed OR cement doesn't reach surface on a well on the pad, a DV Tool may be used. With Cement Baskets above and Below it.

DRILLING ENGINEER:

Nick Spence / John Tuckwiller / Brian Cocchiere / Tyler Elliott

DATE:

DATE:

DRILLING SUPERINTENDENT:

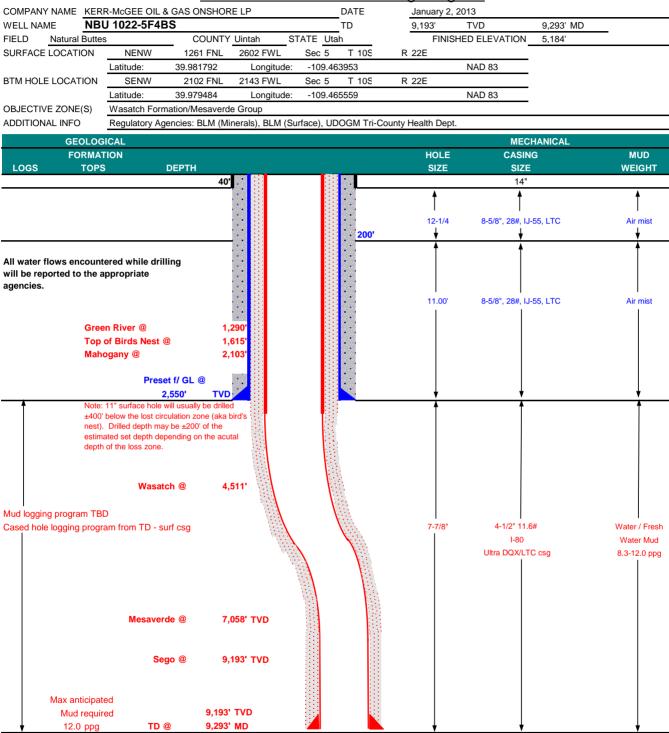
Kenny Gathings / Lovel Young

NBU 1022-5C Pad- Drilling Program Approved by Drilling- 010313.xlsx

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained



KERR-McGEE OIL & GAS ONSHORE LP Wasatch/Mesaverde Drilling Program





KERR-McGEE OIL & GAS ONSHORE LP
Wasatch/Mesaverde Drilling Program

CASING PROGRAM	<u>/</u>				DESIGN F	ACTORS					
										LTC	DQX
	SIZE	INT	ERVA	L	WT.	GR.	CPLG.	BURST	COLLAPSE	TE	NSION
CONDUCTOR	14"		0-40'								
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,550	28.00	IJ-55	LTC	2.11	1.58	5.57	N/A
								7,780	6,350		267,035
PRODUCTION	4-1/2"	0	to	5,000	11.60	I-80	DQX	1.11	1.11		3.03
								7 700	6 350	222 000	

Surface Casing:

(Burst Assumptions: TD = 12.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

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SURFACE		NOTE: If well will circulate water to so	urface, option	n 2 will be u	tilized	
Option 2 LEAD	2,050'	Premium cmt + 16% Gel + 10 pps gilsonite	250	35%	12.00	2.86
		+ 0.25 pps Flocele + 3% salt BWOC + GR 3 pps				
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
		+ 0.25 pps Flocele + 3% salt BWOC + GR 3 pps				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION LEAD	4,003'	Premium Lite II +0.25 pps celloflake + .4% FL-52	310	35%	12.00	3.38
		+ .3% R-3 + .5 lbs/sk Kol-Seal + 6%Bentonite II +				
		1.2% Sodium Metasilicate + .05 lbs/sk Static Free				
TAIL	5,290'	50/50 Poz/G + 10% salt + .05 lbs/sk Static Free	1,250	35%	14.30	1.31
		+ 1.2% Sodium Metasilicate + .5 % EC-1				
		+.002 gps FP-6L + 2% Bentonite II				

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

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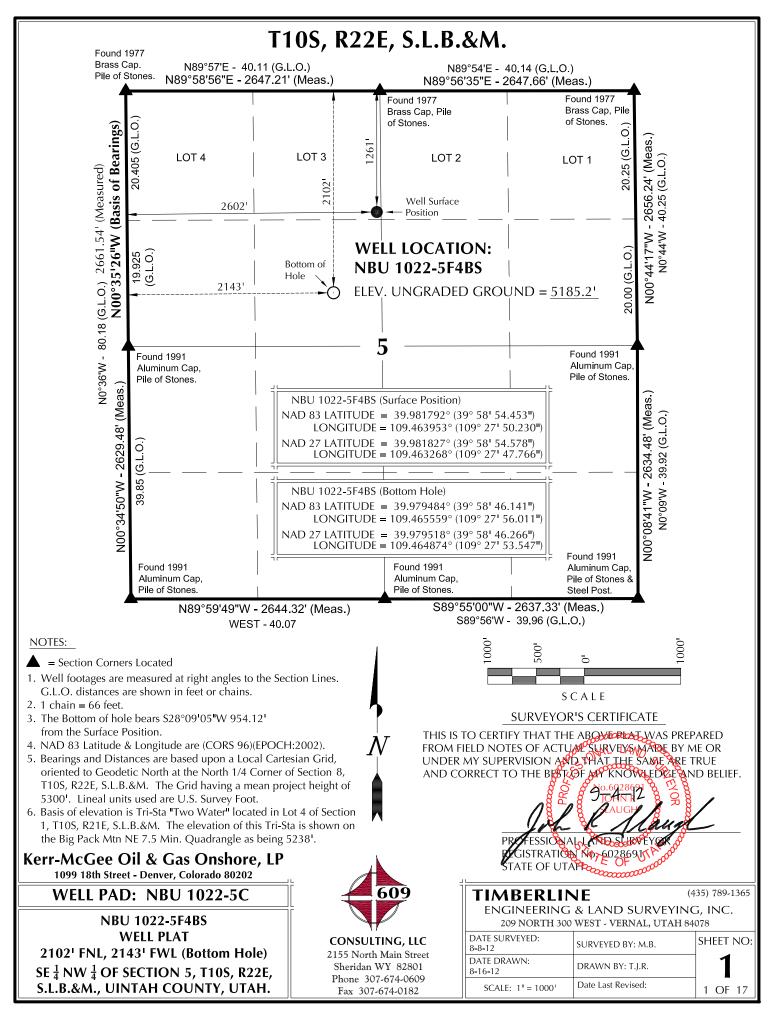
Kenny Gathings / Lovel Young

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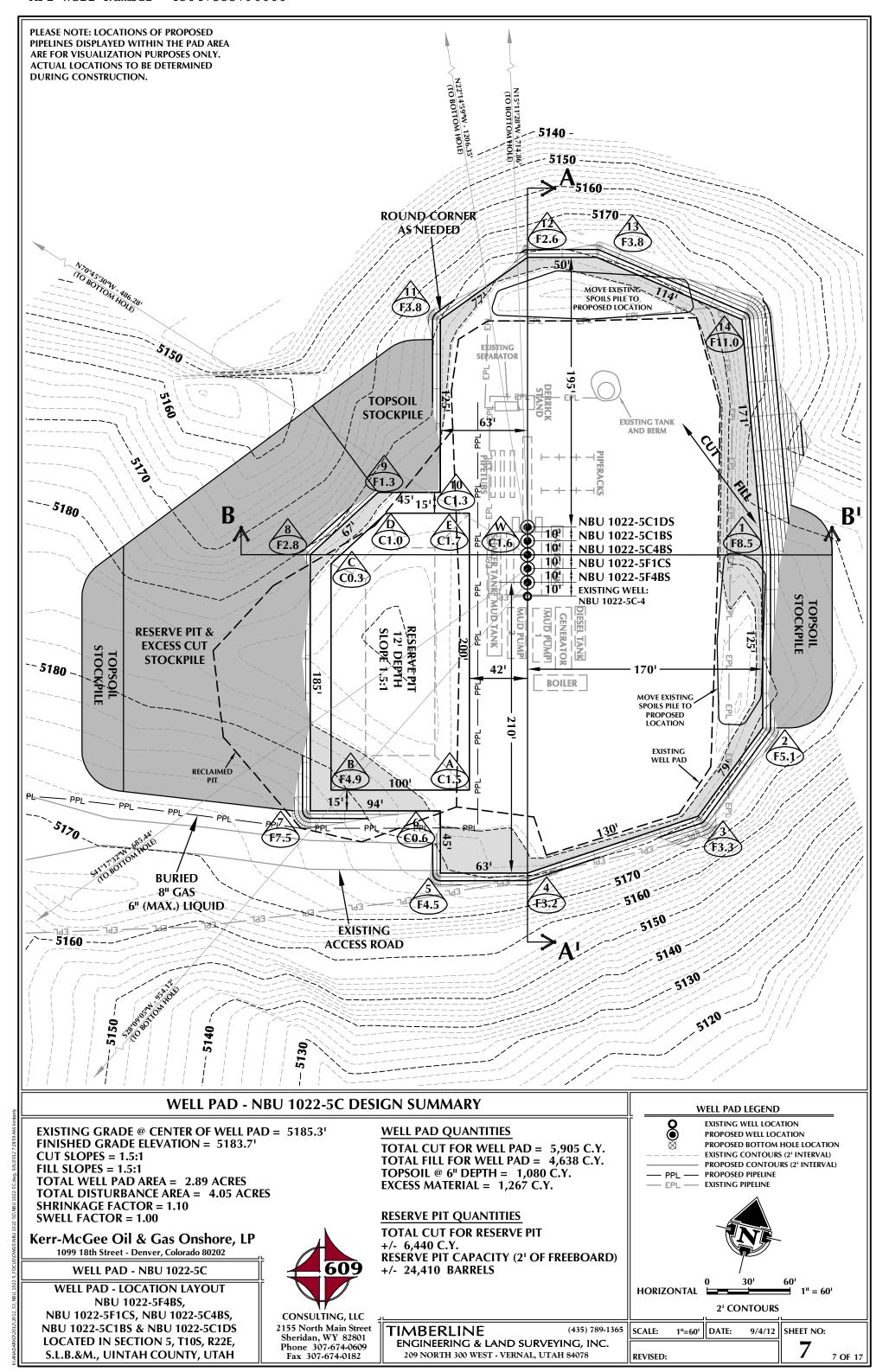
DRILLING ENGINEER:		DATE	<u> </u>
	Nick Spence / John Tuckwiller / Brian Cocchiere /	Tyler Elliott	
DRILLING SUPERINTENDENT:		DATE	:

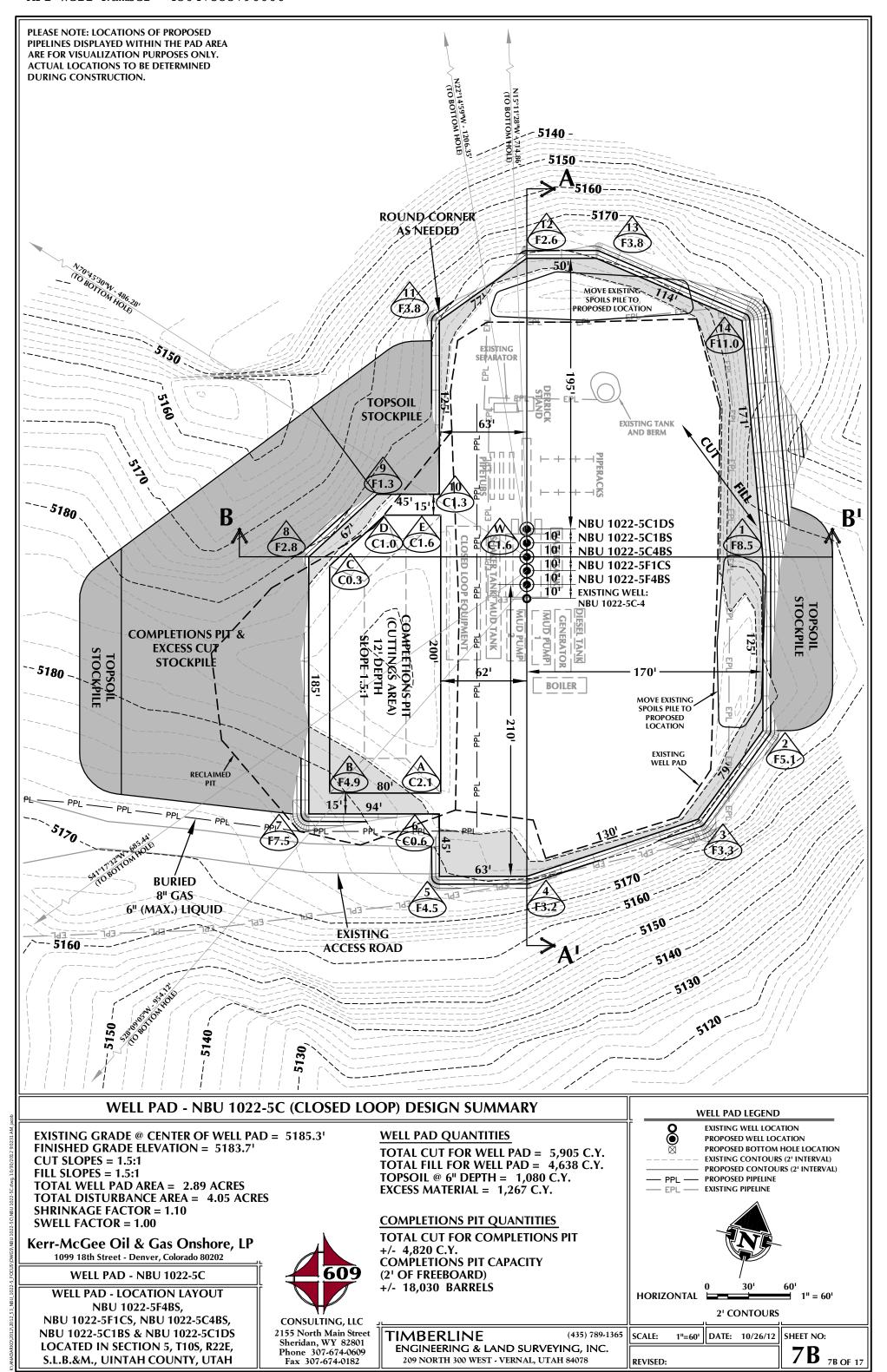
NBU 1022-5C Pad- Drilling Program Approved by Drilling- 010313.xlsx

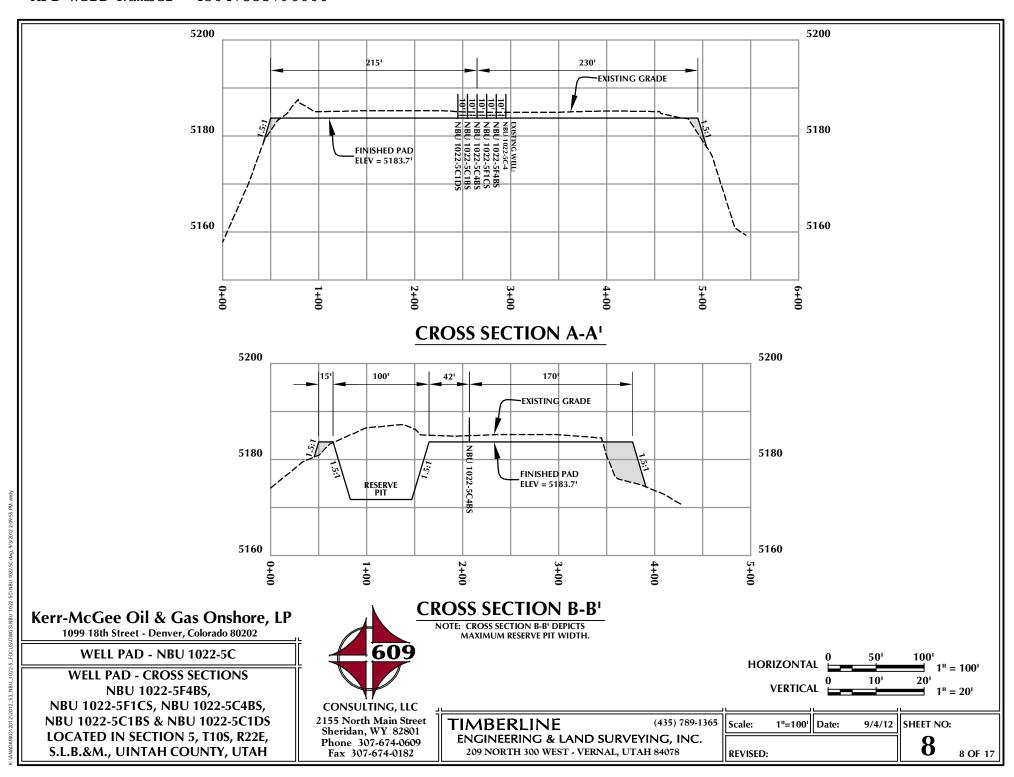
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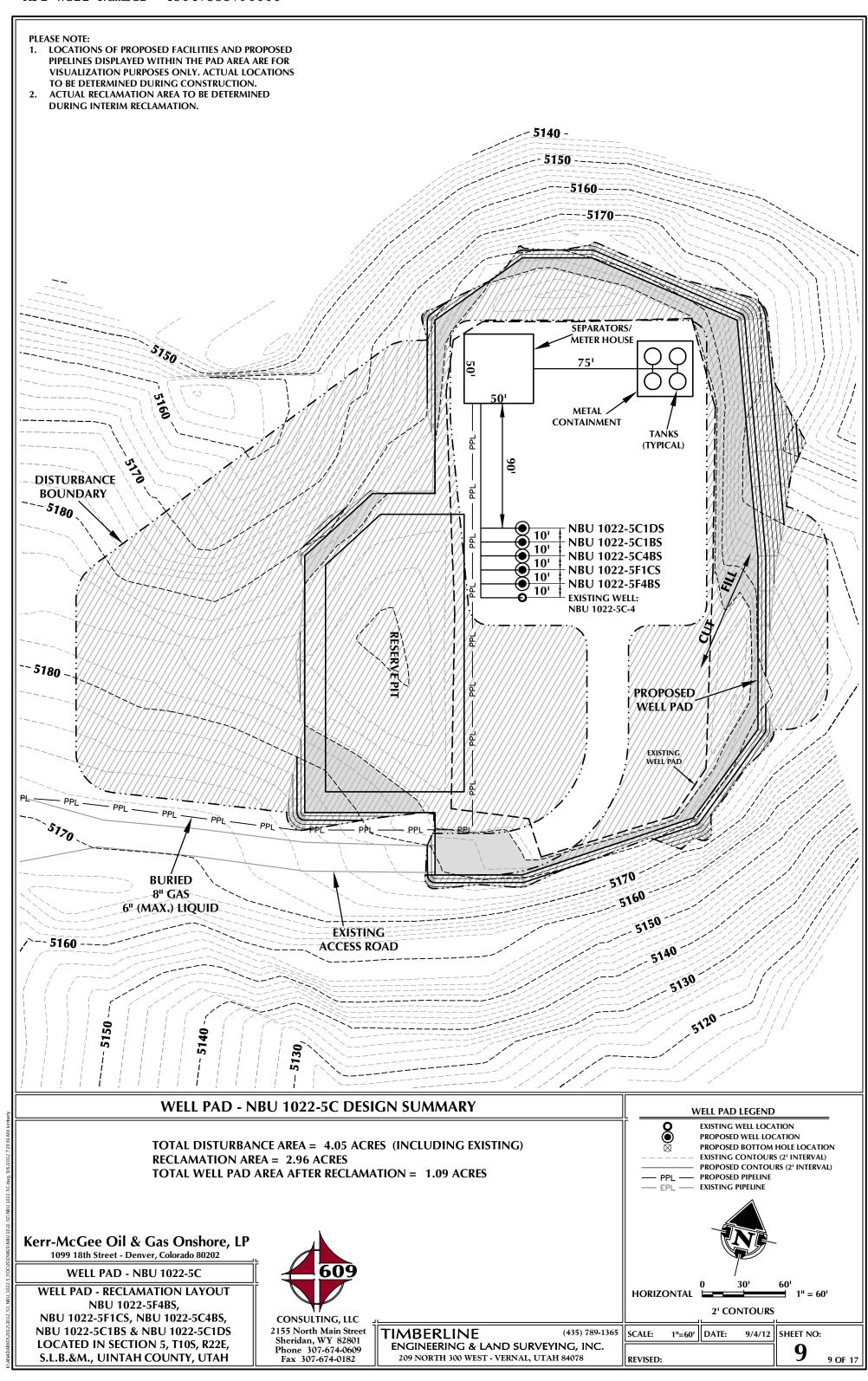


			SUR	FACE POSI	TION			BOTTOM HOLE						
WELL NAME					NAD27				NAE	083	NAE			
NBU	LATITUDE	NAD83	LATITUD		ONGITUDE °27'47.766"	FOOTAGES	39°58'46		LONGITUDE 109°27'56.011"	LATITUDE	LONGITUDE 109°27'53.547"			
1022-5F4BS	39.981792°			39.981827°		.463268°	2602' FWL	39.9794		109 27 36.011 109.465559°	39.979518°	109 27 33.347 109.464874°	2102 FINE 2143' FWL	
NBU 1022-5F1CS	39°58'54.549	.00 =, 00		39°58'54.6' 39.981854°	I .	°27'47.796"	I	39°58'49 39.9804		109°27'56.069" 109.465575°	39°58'49.586" 39.980440°			
NBU	39°58'54.645					.463277° °27'47.825"	2600' FWL 1241' FNL	39.9804 39°58'56		109.4655/5° 109°27'56.185"		109.464890° 109°27'53.721"	2142' FWL 1081' FNL	
1022-5C4BS	39.981846°		-	39.981881°		.463285°	2597' FWL	39.9822		109.465607°	39.982320°	109.464922°	2140' FWL	
NBU 1022-5C1BS	39°58'54./41 39.981873°	103 = 7 50		39°58'54.8 39.981907°	1	°27'47.854" .463293°	1232' FNL 2595' FWL	39°59'05 39.9849		109°27'56.185" 109.465607°	39°59'05.897" 39.984972°	109°27'53.720" 109.464922°	115' FNL 2150' FWL	
NBU	5C1DS 39.981899° 109.463985° 39.9819 5C-4 39°58'54.356" 109°27'50.201" 39°58'5 39.981766° 109.463945° 39.9818 RELA NAME NORTH EAST WELL NAME NAME NORTH EAST NBU 1022-5F1CS SC1DS 689.9" -187.3" -187.3" -187.3"					027'47.882"	1222' FNL 2593' FWL	39°59'0° 39.9837		109°27'52.751"	39°59'01.778" 39.983827°	109°27'50.287"		
NBU			-	39°58'54.4	1.00	1" 109°27'47.737" 1271' FNL		39.9037	93	109.464653°	39.903027	109.463969°	2413' FWL	
1022-5C-4	39.981766°	109.46394	5°	39.981800°		.463260°	2604' FWL							
WELL NAME	NORTH	EACT	VA/EI		RELATIVE COORDINATES - From Surface ME NORTH EAST WELL				to Botto NOR		WELL NAM	IE NORTH	EAST	
NBU					-515.0		NIDII	INAME	160.		NBU	1116.5	-456.8 ¹	
1022-5F4BS			1022	-5F1CS	-515.0	-432.	1022-	5C4BS	100.	.5 -435.1	1022-5C1B	s 1110.5	-430.0	
WELL NAME NBU							N14 F04 4 1	2011147	714	0.61				
1022-5C1DS	689.9	-18/.3				<u> </u>	N15°11'.			86'				
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								NBU	U 10 :	22-5C1DS A	z. to Exist. W.	H.=167.01222	° 50.0'	
				/_			[s-1	NB	U 10	22-5C1BS /	Az. to Exist. W.	H.=166.87361	° 40.0'	
					\	\mathcal{A}	10,			022-5C4BS				
					\rightarrow	_ \	10			022-5F1CS				
		,		/ /		\	\	/ \ /		1022-5F4BS			50° 10.0'	
				/ /		801127.11A		o You E	EXIST	ING WELL:	: NBU 1022	2-5C-4	•	
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			1	1 /			, 'S' `S	,					 	
Kerr-Mc	Gee Oil :	& Cas C)nek	nore II	P	,	' ' '				SCALE		⁻' / / ∥	
	8th Street - De					/					JCALE		/	
	L PAD -				٦Ļ		609	:	TI	MBERL	INF	(4	35) 789-1365	
					井	1				ENGINEERIN				
	PAD INT									209 NORTH		RNAL, UTAH 840	' II	
	WELLS - NB 1022-5F1CS						ULTING, LI		DATE 8-8-1	E SURVEYED:	SURVEYED B	BY: M.B.	SHEET NO:	
	1022-311C3 1022-5C1BS						orth Main Str an WY 8280		DATE	e drawn:	DRAWN BY:	TIR	6	
LOCA	TED IN SEC	TION 5, T	105, 1	R22E,			an WY 8280 307-674-060		8-16-				U	
S.L.B.	&M., UINTA	H COUN	TY, U	TAH.			07-674-0182		S	CALE: 1" = 60'	Date Last Rev	vised:	6 OF 17	









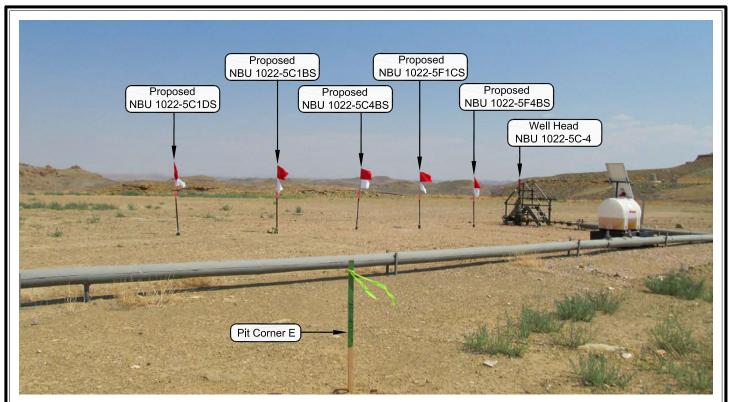


PHOTO VIEW: FROM PIT CORNER E TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: EASTERLY

Kerr-McGee Oil & Gas Onshore, LP

WELL PAD - NBU 1022-5C

LOCATION PHOTOS
NBU 1022-5F4BS,
NBU 1022-5F1CS, NBU 1022-5C4BS,
NBU 1022-5C1BS & NBU 1022-5C1DS
LOCATED IN SECTION 5, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC 2155 North Main Street Sheridan WY 82801 Phone 307-674-0609

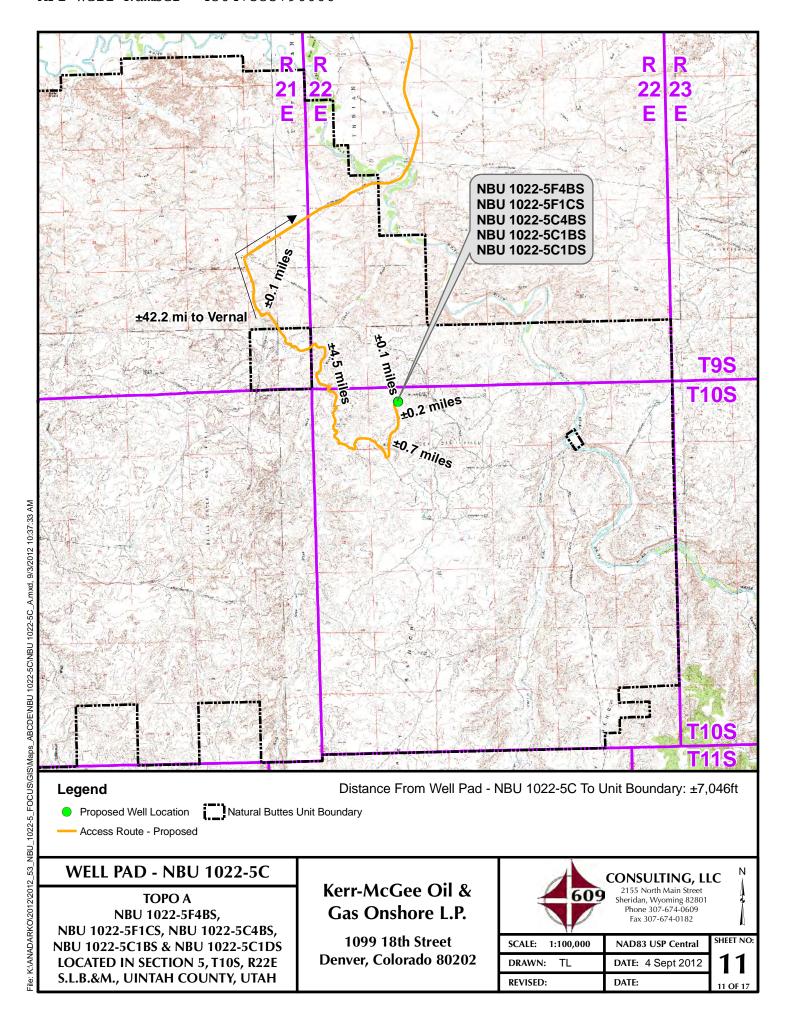
Fax 307-674-0182

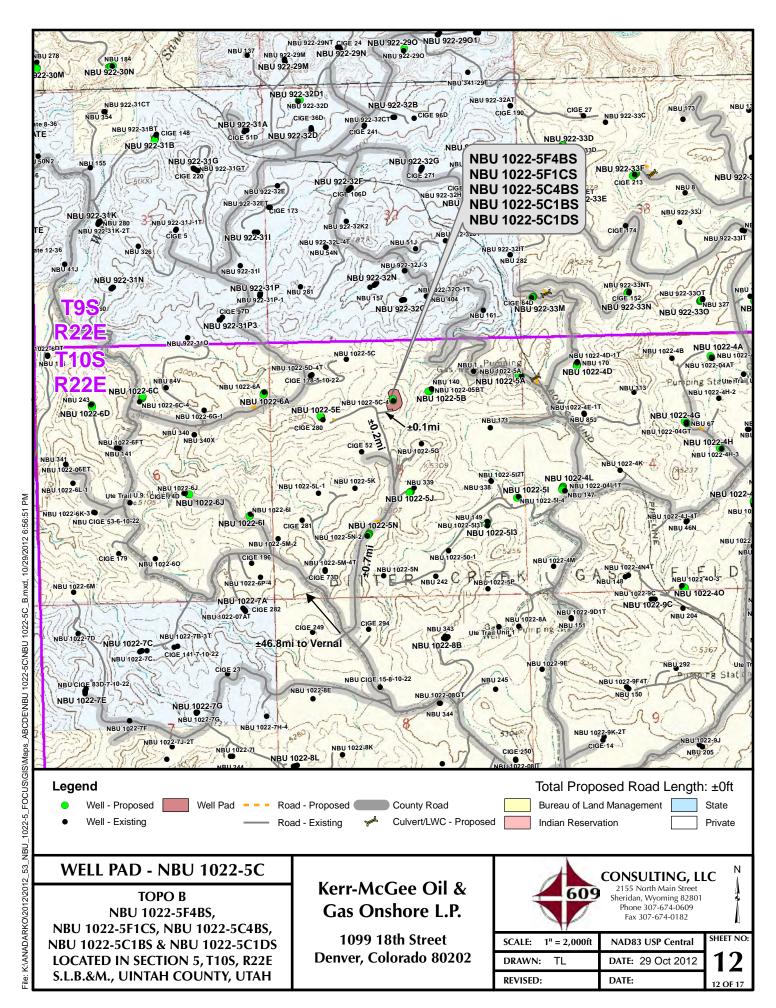
TIMBERLINE

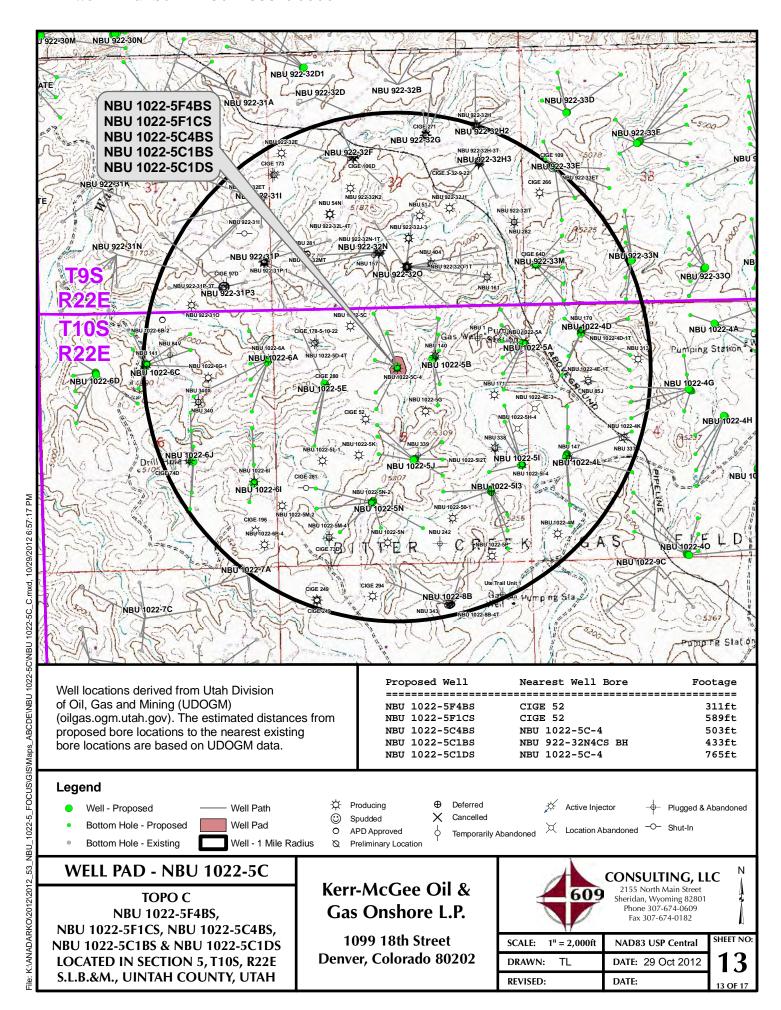
(435) 789-1365

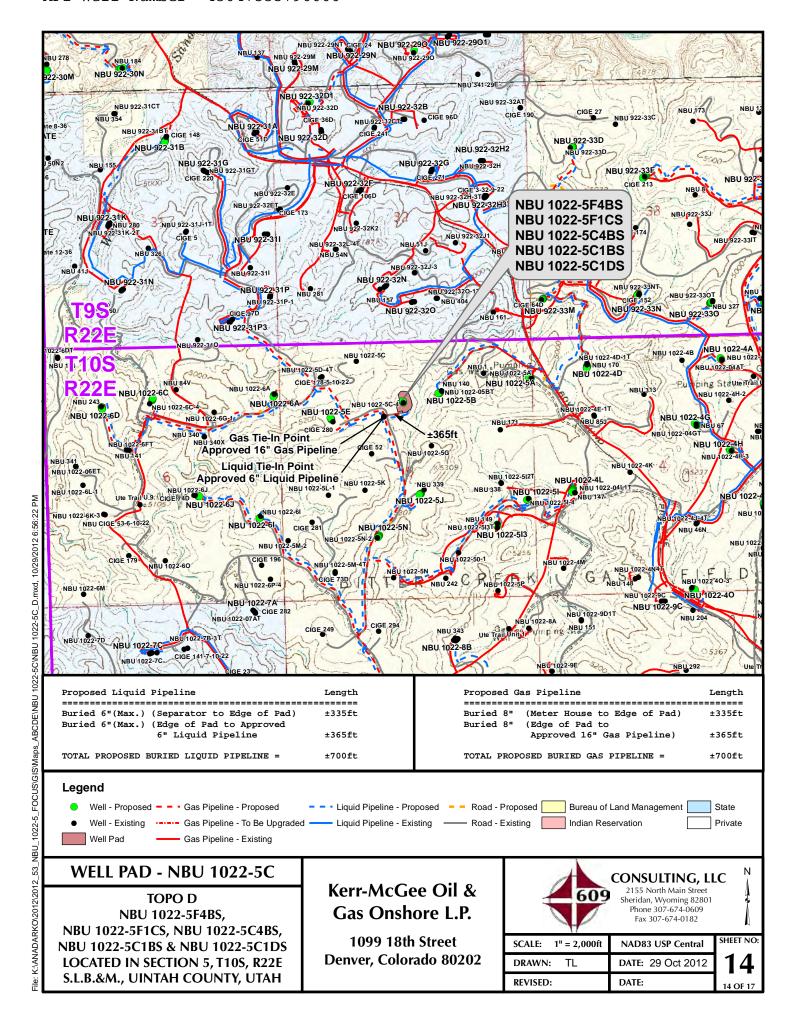
ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078

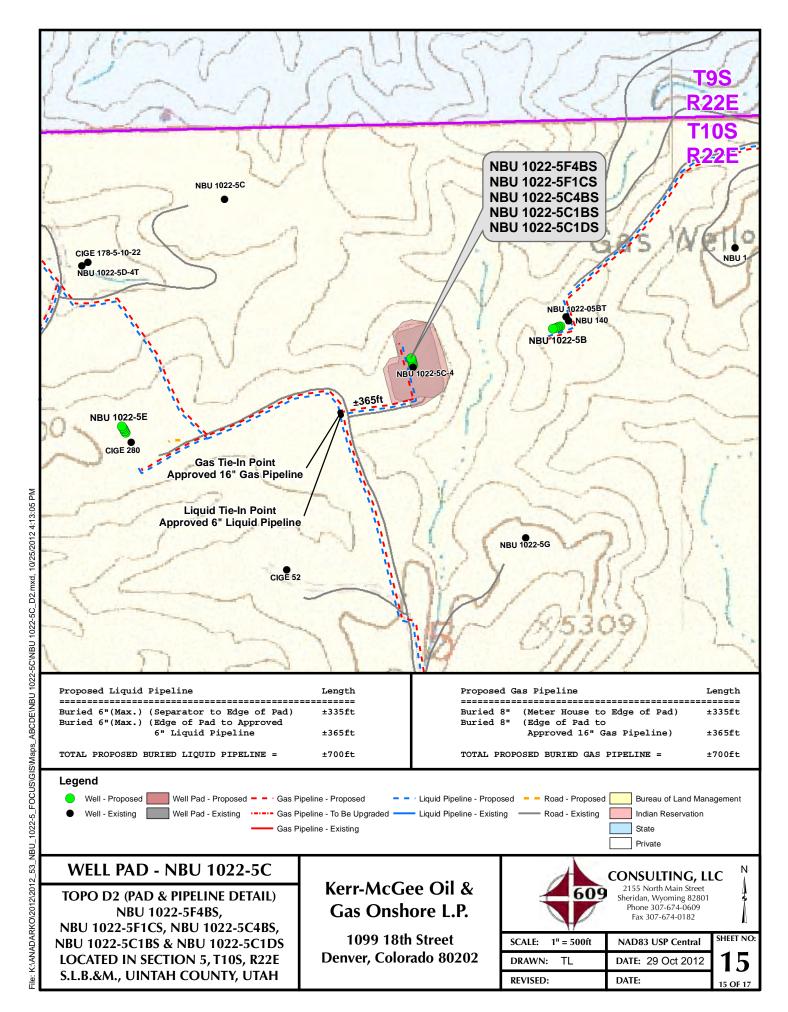
DATE PHOTOS TAKEN: 8-8-12	PHOTOS TAKEN BY: M.B.	SHEET NO:
DATE DRAWN: 8-16-12	DRAWN BY: T.J.R.	10
Date Last Revised:		10 OF 17

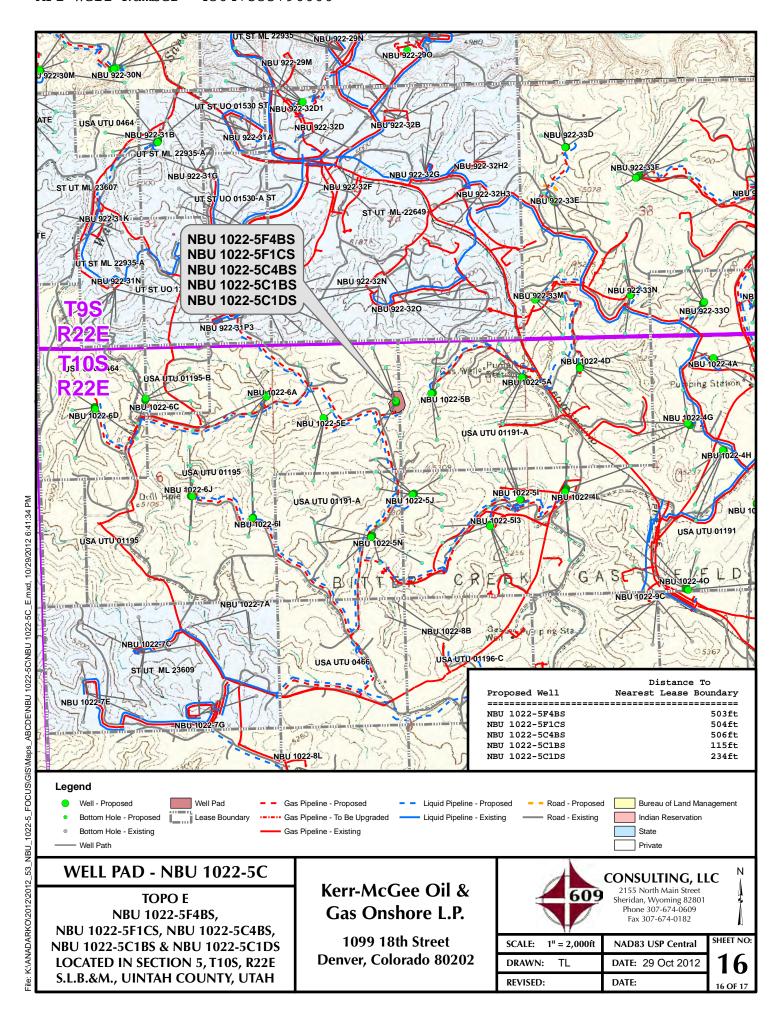












Kerr-McGee Oil & Gas Onshore, LP WELL PAD – NBU 1022-5C WELLS - NBU 1022-5F4BS, NBU 1022-5F1CS, NBU 1022-5C4BS, NBU 1022-5C1BS & NBU 1022-5C1DS Section 5, T10S, R22E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 18.7 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 0.1 miles to a second Class D County Road to the southeast. Exit right and proceed in a southeasterly direction along the second Class D County Road approximately 4.5 miles to a third Class D County Road to the north. Exit left and proceed in a northerly direction along the third Class D County Road approximately 0.7 miles to a service road to the northwest. Proceed along the service road in a northwesterly direction approximately 0.2 miles to a second service road to the east. Exit right and proceed in an easterly direction along the second service road approximately 0.1 miles to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 47.8 miles in a southerly direction.

SHEET 17 OF 17

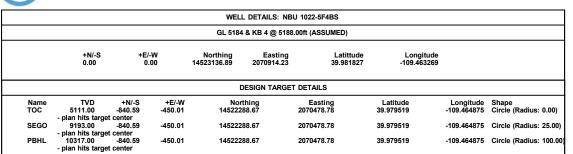
API Well Number: 43047750ject:900040-UTM (feet), NAD27, Zone 12N

Scientific Drilling

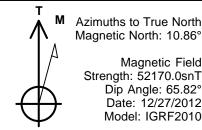
Site: NBU 1022-5C Pad Well: NBU 1022-5F4BS

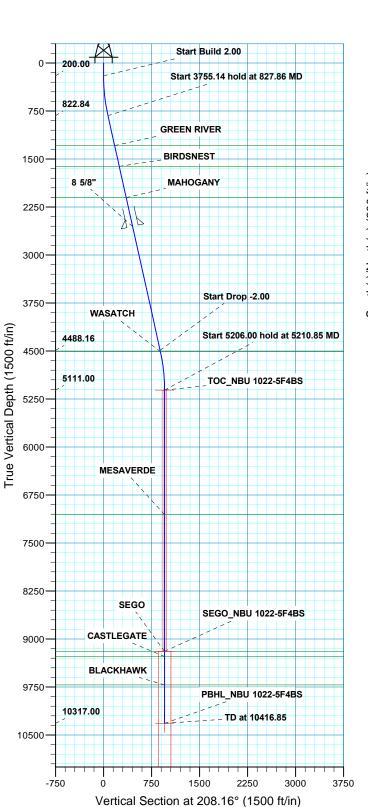
Wellbore: OH

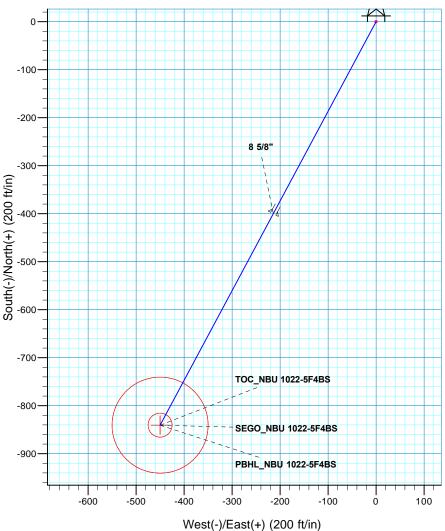
Design: PLAN #1 PERMIT











				SECTI	ON E	DETAILS					
MD	Inc	Azi	TVD	+N/-S	+E	/-W	Dlea	TFace	VSect		
0.00	0.00	0.00	0.00	0.00	0		0.00	0.00	0.00		
200.00	0.00	0.00	200.00	0.00	0	.00	0.00	0.00	0.00		
827.86	12.56	208.16	822.84	-60.41	-32	2.34	2.00	208.16	68.53		
4583.00	12.56	208.16	4488.16	-780.18	-417	.66	0.00	0.00	884.94		
5210.85	0.00	0.00	5111.00	-840.59	-450	.01	2.00	180.00	953.47	TOC NBU 1022-5F4BS	
10416.85	0.00	0.00	10317.00	-840.59	-450	.01	0.00	0.00	953.47	PBHL_NBU 1022-5F4BS	
										_	
					Т		F	ORMATIO	ON TOP	DETAILS	
						TVDPath		MDF		Formation	_
PROJECT DETAILS: I	JTAH - I	UTM (fee	et), NAD27	, Zone 12N		1290.00		130		GREEN RIVER	
					\dashv	1615.00		1639		BIRDSNEST	
Geodetic System: Univers	al Trans	sverse M	lercator (L	JS Survey Fo	eet	2103.00		213		MAHOGANY	
Datum: NAD 19		CON CO	ONUS)		- 1	4511.00		460		WASATCH	
Ellipsoid: Clarke 1						7058.00		715		MESAVERDE	
Zone: Zone 12						9193.00		929		SEGO	
Location: SECTIO						9274.00		937		CASTLEGATE	
System Datum:Mean Se	ea Level	I				9717.00		981		BLACKHAWK	
						57 17.00	•	301	0.00	BEAGINIANI	
				CASI	NG D	ETAILS					
			TVD	MD		Name)	Si	ze		
			2553.00	2600.4	41	8 5/8"		8.6	25		
						Pla	ın: PL	AN #1 PI	ERMIT (N	IBU 1022-5F4BS/OH)	_

Created By: Gabe Kendall Date: 14:13, December 27 2012

RECEIVED:



US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N NBU 1022-5C NBU 1022-5F4BS

OH

Plan: PLAN #1 PERMIT

Standard Planning Report

27 December, 2012





SDIPlanning Report



Database: EDM 5000.1 Single User Db Company: US ROCKIES REGION PLAI

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-5C

 Well:
 NBU 1022-5F4BS

Wellbore: OH

Design: PLAN #1 PERMIT

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-5F4BS

GL 5184 & KB 4 @ 5188.00ft (ASSUMED) GL 5184 & KB 4 @ 5188.00ft (ASSUMED)

True

Minimum Curvature

Project UTAH - UTM (feet), NAD27, Zone 12N

Map System: Universal Transverse Mercator (US Survey Feet)

Geo Datum: NAD 1927 (NADCON CONUS)

Map Zone: Zone 12N (114 W to 108 W)

Mean Sea Level

Site NBU 1022-5C, SECTION 5 T10S R22E

Northing: 14,523,136.89 usft Site Position: Latitude: 39.981827 From: Lat/Long Easting: 2,070,914.23 usft Longitude: -109.463269 **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 0.99 13.200 in

System Datum:

Well NBU 1022-5F4BS, 1261 FNL 2602 FWL

 Well Position
 +N/-S
 0.00 ft
 Northing:
 14,523,136.89 usft
 Latitude:
 39.981827

 +E/-W
 0.00 ft
 Easting:
 2,070,914.23 usft
 Longitude:
 -109.463269

Position Uncertainty 0.00 ft Wellhead Elevation: Ground Level: 5,184.00 ft

Wellbore ОН Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°) 12/27/12 IGRF2010 10.86 65.82 52,170

PLAN #1 PERMIT Design **Audit Notes:** Version: Phase: PLAN Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 208.16

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
827.86	12.56	208.16	822.84	-60.41	-32.34	2.00	2.00	0.00	208.16	
4,583.00	12.56	208.16	4,488.16	-780.18	-417.66	0.00	0.00	0.00	0.00	
5,210.85	0.00	0.00	5,111.00	-840.59	-450.01	2.00	-2.00	0.00	180.00	TOC_NBU 1022-5F4
10,416.85	0.00	0.00	10,317.00	-840.59	-450.01	0.00	0.00	0.00	0.00	PBHL_NBU 1022-5F4



SDI Planning Report



EDM 5000.1 Single User Db Database: Company: Project:

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-5C Site: Well: NBU 1022-5F4BS

Wellbore: ОН

Design: PLAN #1 PERMIT Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

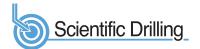
Survey Calculation Method:

Well NBU 1022-5F4BS

GL 5184 & KB 4 @ 5188.00ft (ASSUMED) GL 5184 & KB 4 @ 5188.00ft (ASSUMED)

True

ign:	PLAN #1 PER	IVII I							
nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00 100.00 200.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 100.00 200.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
Start Build 2.0 300.00 400.00	2.00 4.00	208.16 208.16	299.98 399.84	-1.54 -6.15	-0.82 -3.29	1.75 6.98	2.00 2.00	2.00 2.00	0.00 0.00
500.00 600.00 700.00 800.00	6.00 8.00 10.00 12.00	208.16 208.16 208.16 208.16	499.45 598.70 697.47 795.62	-13.84 -24.58 -38.37 -55.19	-7.41 -13.16 -20.54 -29.55	15.69 27.88 43.52 62.60	2.00 2.00 2.00 2.00	2.00 2.00 2.00 2.00	0.00 0.00 0.00 0.00
827.86 Start 3755.14	12.56 hold at 827.86	208.16 MD	822.84	-60.41	-32.34	68.53	2.00	2.00	0.00
900.00 1,000.00 1,100.00 1,200.00 1,300.00	12.56 12.56 12.56 12.56 12.56 12.56	208.16 208.16 208.16 208.16 208.16	893.26 990.87 1,088.48 1,186.08 1,283.69	-74.24 -93.41 -112.58 -131.74 -150.91	-39.75 -50.01 -60.27 -70.53 -80.79	84.21 105.95 127.69 149.44 171.18 172.58	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
GREEN RIVE		200.10	1,290.00	-102.10	-01.45	172.30	0.00	0.00	0.00
1,400.00 1,500.00 1,600.00 1,639.43 BIRDSNEST	12.56 12.56 12.56 12.56	208.16 208.16 208.16 208.16	1,381.30 1,478.91 1,576.52 1,615.00	-170.08 -189.25 -208.41 -215.97	-91.05 -101.31 -111.57 -115.62	192.92 214.66 236.40 244.97	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
1,700.00 1,800.00 1,900.00 2,000.00 2,100.00	12.56 12.56 12.56 12.56 12.56	208.16 208.16 208.16 208.16 208.16	1,674.12 1,771.73 1,869.34 1,966.95 2,064.56	-227.58 -246.75 -265.92 -285.08 -304.25	-121.83 -132.10 -142.36 -152.62 -162.88	258.14 279.88 301.62 323.37 345.11	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,139.39	12.56	208.16	2,103.00	-311.80	-166.92	353.67	0.00	0.00	0.00
2,200.00 2,300.00 2,400.00 2,500.00 2,600.00 2,600.41	12.56 12.56 12.56 12.56 12.56	208.16 208.16 208.16 208.16 208.16 208.16	2,162.16 2,259.77 2,357.38 2,454.99 2,552.60 2,553.00	-323.42 -342.59 -361.75 -380.92 -400.09 -400.17	-173.14 -183.40 -193.66 -203.92 -214.18 -214.23	366.85 388.59 410.33 432.07 453.81 453.90	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
8 5/8" 2,700.00 2,800.00 2,900.00	12.56 12.56 12.56	208.16 208.16 208.16	2,650.20 2,747.81 2,845.42	-419.26 -438.42 -457.59	-224.45 -234.71 -244.97	475.55 497.30 519.04	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
3,000.00 3,100.00 3,200.00 3,300.00 3,400.00	12.56 12.56 12.56 12.56 12.56	208.16 208.16 208.16 208.16 208.16	2,943.03 3,040.64 3,138.24 3,235.85 3,333.46	-476.76 -495.93 -515.09 -534.26 -553.43	-255.23 -265.49 -275.75 -286.01 -296.27	540.78 562.52 584.26 606.00 627.74	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
3,500.00 3,600.00 3,700.00 3,800.00 3,900.00	12.56 12.56 12.56 12.56 12.56	208.16 208.16 208.16 208.16 208.16	3,431.07 3,528.68 3,626.28 3,723.89 3,821.50	-572.60 -591.76 -610.93 -630.10 -649.27	-306.54 -316.80 -327.06 -337.32 -347.58	649.48 671.23 692.97 714.71 736.45	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,000.00	12.56	208.16	3,919.11	-668.43	-357.84	758.19	0.00	0.00	0.00



SDI Planning Report



EDM 5000.1 Single User Db Database: Company: Project:

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-5C Site: Well: NBU 1022-5F4BS

Wellbore: ОН

Design: PLAN #1 PERMIT Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well NBU 1022-5F4BS

GL 5184 & KB 4 @ 5188.00ft (ASSUMED) GL 5184 & KB 4 @ 5188.00ft (ASSUMED)

True

ned Survey									
									_
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,200.00	12.56	208.16	4,114.32	-706.77	-378.36	801.67	0.00	0.00	0.00
4,300.00	12.56 12.56	208.16 208.16	4,211.93 4,309.54	-725.94 -745.40	-388.62 -398.89	823.41 845.16	0.00	0.00 0.00	0.00
4,400.00				-745.10			0.00		0.00
4,500.00 4,583.00	12.56 12.56	208.16 208.16	4,407.15 4,488.16	-764.27 -780.18	-409.15 -417.66	866.90 884.94	0.00 0.00	0.00 0.00	0.00 0.00
Start Drop -2		200.10	1, 100.10	700.10	117.00	001.01	0.00	0.00	0.00
4,600.00 4,606.38	12.22 12.09	208.16 208.16	4,504.77 4,511.00	-783.40 -784.58	-419.38 -420.02	888.59 889.93	2.00 2.00	-2.00 -2.00	0.00 0.00
WASATCH									
4,700.00	10.22	208.16	4,602.85	-800.54	-428.57	908.04	2.00	-2.00	0.00
4,800.00	8.22	208.16	4,701.55	-814.66	-436.12	924.06	2.00	-2.00	0.00
4,900.00	6.22 4.22	208.16 208.16	4,800.76 4,900.34	-825.74 -833.76	-442.05 -446.34	936.62 945.71	2.00	-2.00 -2.00	0.00 0.00
5,000.00 5,100.00	2.22	208.16	5,000.18	-838.70	-446.34 -448.99	945.71 951.32	2.00 2.00	-2.00 -2.00	0.00
5,200.00	0.22	208.16	5,100.15	-840.58	-450.00	953.45	2.00	-2.00	0.00
5,210.85	0.00	0.00	5,111.00	-840.59	-450.01	953.47	2.00	-2.00	1,399.14
	0 hold at 5210.8			3 70.00	.00.01	550.17	2.00	2.00	.,555.11
5,300.00	0.00	0.00	5,200.15	-840.59	-450.01	953.47	0.00	0.00	0.00
5,400.00	0.00	0.00	5,300.15	-840.59	-450.01	953.47	0.00	0.00	0.00
5,500.00	0.00	0.00	5,400.15	-840.59	-450.01	953.47	0.00	0.00	0.00
5,600.00	0.00	0.00	5,500.15	-840.59	-450.01	953.47	0.00	0.00	0.00
5,700.00	0.00	0.00	5,600.15	-840.59	-450.01	953.47	0.00	0.00	0.00
5,800.00	0.00	0.00	5,700.15	-840.59	-450.01	953.47	0.00	0.00	0.00
5,900.00	0.00	0.00	5,800.15	-840.59	-450.01	953.47	0.00	0.00	0.00
6,000.00	0.00	0.00	5,900.15	-840.59	-450.01	953.47	0.00	0.00	0.00
6,100.00	0.00	0.00	6,000.15	-840.59	-450.01	953.47	0.00	0.00	0.00
6,200.00	0.00	0.00	6,100.15	-840.59	-450.01	953.47	0.00	0.00	0.00
6,300.00	0.00	0.00	6,200.15	-840.59	-450.01	953.47	0.00	0.00	0.00
6,400.00	0.00	0.00	6,300.15	-840.59	-450.01	953.47	0.00	0.00	0.00
6,500.00 6,600.00	0.00 0.00	0.00 0.00	6,400.15 6,500.15	-840.59 -840.59	-450.01 -450.01	953.47 953.47	0.00 0.00	0.00 0.00	0.00 0.00
6,700.00	0.00	0.00	6,600.15	-840.59	-450.01	953.47	0.00	0.00	0.00
6,800.00	0.00	0.00	6,700.15	-840.59	-450.01	953.47	0.00	0.00	0.00
6,900.00 7,000.00	0.00 0.00	0.00	6,800.15	-840.59 -840.59	-450.01	953.47 953.47	0.00	0.00	0.00
7,000.00	0.00	0.00 0.00	6,900.15 7,000.15	-840.59 -840.59	-450.01 -450.01	953.47 953.47	0.00 0.00	0.00 0.00	0.00 0.00
7,157.85	0.00	0.00	7,058.00	-840.59	-450.01	953.47	0.00	0.00	0.00
7,157.85		0.00	1,000.00	-040.09	-4 50.01	900.47	0.00	0.00	0.00
7,200.00	0.00	0.00	7,100.15	-840.59	-450.01	953.47	0.00	0.00	0.00
7,300.00	0.00	0.00	7,200.15	-840.59	-450.01	953.47	0.00	0.00	0.00
7,400.00	0.00	0.00	7,300.15	-840.59	-450.01	953.47	0.00	0.00	0.00
7,500.00	0.00	0.00	7,400.15	-840.59	-450.01	953.47	0.00	0.00	0.00
7,600.00	0.00	0.00	7,500.15	-840.59	-450.01	953.47	0.00	0.00	0.00
7,700.00	0.00	0.00	7,600.15	-840.59	-450.01	953.47	0.00	0.00	0.00
7,800.00	0.00	0.00	7,700.15	-840.59	-450.01	953.47	0.00	0.00	0.00
7,900.00	0.00	0.00	7,800.15	-840.59	-450.01	953.47	0.00	0.00	0.00
8,000.00	0.00	0.00	7,900.15	-840.59	-450.01	953.47	0.00	0.00	0.00
8,100.00	0.00	0.00	8,000.15	-840.59	-450.01	953.47	0.00	0.00	0.00
8,200.00	0.00	0.00	8,100.15	-840.59	-450.01	953.47	0.00	0.00	0.00
8,300.00	0.00	0.00	8,200.15	-840.59	-450.01	953.47	0.00	0.00	0.00
8,400.00	0.00	0.00	8,300.15 8,400.15	-840.59	-450.01	953.47	0.00	0.00	0.00
8,500.00	0.00	0.00	,	-840.59	-450.01	953.47	0.00	0.00	0.00
8,600.00	0.00	0.00	8,500.15	-840.59	-450.01	953.47	0.00	0.00	0.00



SDIPlanning Report



Database: Company: Project:

Site:

Well:

EDM 5000.1 Single User Db US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-5C NBU 1022-5F4BS

Wellbore: OH

Design: PLAN #1 PERMIT

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-5F4BS

GL 5184 & KB 4 @ 5188.00ft (ASSUMED) GL 5184 & KB 4 @ 5188.00ft (ASSUMED)

True

nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,700.00 8,800.00 8,900.00 9,000.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	8,600.15 8,700.15 8,800.15 8,900.15	-840.59 -840.59 -840.59 -840.59	-450.01 -450.01 -450.01 -450.01	953.47 953.47 953.47 953.47	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
9,100.00 9,200.00 9,292.85	0.00 0.00 0.00	0.00 0.00 0.00	9,000.15 9,100.15 9,193.00	-840.59 -840.59 -840.59	-450.01 -450.01 -450.01	953.47 953.47 953.47	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
	_NBU 1022-5F								
9,300.00 9,373.85	0.00 0.00	0.00 0.00	9,200.15 9,274.00	-840.59 -840.59	-450.01 -450.01	953.47 953.47	0.00 0.00	0.00 0.00	0.00 0.00
CASTLEGATI	E								
9,400.00 9,500.00 9,600.00 9,700.00 9,800.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	9,300.15 9,400.15 9,500.15 9,600.15 9,700.15	-840.59 -840.59 -840.59 -840.59	-450.01 -450.01 -450.01 -450.01	953.47 953.47 953.47 953.47 953.47	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
9,816.85	0.00	0.00	9,717.00	-840.59	-450.01	953.47	0.00	0.00	0.00
BLACKHAWK	(
9,900.00 10,000.00 10,100.00 10,200.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	9,800.15 9,900.15 10,000.15 10,100.15	-840.59 -840.59 -840.59 -840.59	-450.01 -450.01 -450.01 -450.01	953.47 953.47 953.47 953.47	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
10,300.00 10,400.00 10,416.85	0.00 0.00 0.00	0.00 0.00 0.00	10,200.15 10,300.15 10,317.00	-840.59 -840.59 -840.59	-450.01 -450.01 -450.01	953.47 953.47 953.47	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
TOC_NBU 1022-5F4BS - plan hits target cent - Circle (radius 0.00)	0.00 ter	0.00	5,111.00	-840.59	-450.01	14,522,288.67	2,070,478.78	39.979519	-109.464875
SEGO_NBU 1022-5F4B - plan hits target cent - Circle (radius 25.00		0.00	9,193.00	-840.59	-450.01	14,522,288.67	2,070,478.78	39.979519	-109.464875
PBHL_NBU 1022-5F4B\$ - plan hits target cent - Circle (radius 100.0		0.00	10,317.00	-840.59	-450.01	14,522,288.67	2,070,478.78	39.979519	-109.464875

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(ft)	(ft)	Name	(in)	(in)
	2,600.41	2,553.00	8 5/8"	8.625	11.000



SDI Planning Report



Database: Company: Project:

Site:

EDM 5000.1 Single User Db US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N NBU 1022-5C

ОН

NBU 1022-5F4BS

Well: Wellbore:

Design:

PLAN #1 PERMIT

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well NBU 1022-5F4BS

GL 5184 & KB 4 @ 5188.00ft (ASSUMED) GL 5184 & KB 4 @ 5188.00ft (ASSUMED)

True

nations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,306.46	1,290.00	GREEN RIVER			
	1,639.43	1,615.00	BIRDSNEST			
	2,139.39	2,103.00	MAHOGANY			
	4,606.38	4,511.00	WASATCH			
	7,157.85	7,058.00	MESAVERDE			
	9,292.85	9,193.00	SEGO			
	9,373.85	9,274.00	CASTLEGATE			
	9,816.85	9,717.00	BLACKHAWK			

Plan Annotations				
Measured	Vertical	Local Coor	dinates	
Depth	Depth	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	Comment
200.00	200.00	0.00	0.00	Start Build 2.00
827.86	822.84	-60.41	-32.34	Start 3755.14 hold at 827.86 MD
4,583.00	4,488.16	-780.18	-417.66	Start Drop -2.00
5,210.85	5,111.00	-840.59	-450.01	Start 5206.00 hold at 5210.85 MD
10,416.85	10,317.00	-840.59	-450.01	TD at 10416.85

Surface Use Plan of Operations 1 of 5

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-5C PAD

<u>API #</u>		NBU 1022-5C1BS		
	Surface:	1232 FNL / 2595 FWL	NENW	Lot 3
	BHL:	115 FNL / 2150 FWL	NENW	Lot 3
<u>API #</u>		NBU 1022-5C1DS		
	Surface:	1222 FNL / 2593 FWL	NENW	Lot 3
	BHL:	532 FNL / 2413 FWL	NENW	Lot 3
API#		NBU 1022-5C4BS		
	Surface:	1241 FNL / 2597 FWL	NENW	Lot 3
	BHL:	1081 FNL / 2140 FWL	NENW	Lot 3
API#		NBU 1022-5F1CS		
	Surface:	1251 FNL / 2600 FWL	NENW	Lot 3
	BHL:	1766 FNL / 2142 FWL	SENW	
API#		NBU 1022-5F4BS		
	_	1261 FNL / 2602 FWL	NENW	Lot 3
	BHL:	2102 FNL / 2143 FWL	SENW	

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on October 10-11, 2012. Present were:

- · Dave Gordon, Lynn Dehner, Aaron Roe and Melissa Wardle BLM;
- · Mitch Batty Timberline Engineering & Land Surveying, Inc.;
- · Jacob Dunham 609 Consulting, LLC.:
- · Alan Rabinoff ICF International;
- · Gina Becker, Tony Kazeck, Casey McKee, Charles Chase and Randy Townley- Kerr-McGee

A. Existing Roads:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Please refer to Topo B for existing roads.

Surface Use Plan of Operations 2 of 5

B. New or Reconstructed Access Roads:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

The following segments are "on-lease"

No new access road is proposed. Please refer to Topo Map B.

C. Location of Existing Wells:

Please refer to Topo C for exiting wells.

D. Location of Existing and/or Proposed Facilities:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

This pad will expand the existing pad for the NBU 1022-5C-4, which is a producing gas well according to Utah Division of Oil, Gas and Mining (UDOGM) records on December 6, 2012. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore LP (Kerr-McGee).

GAS GATHERING

Please refer to Exhibit A and Topo D2- Pad and Pipeline Detail.

The total gas gathering pipeline distance from the meter to the tie in point is ± 700 ' and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- ±335' (0.1 miles) Section 5 T10S R22E (NE/4 NW/4) On-lease UTU01195, BLM surface, New 8" buried gas gathering pipeline from the meter to the edge of the pad. Please refer to Topo D2 Pad and Pipeline Detail.
- ±365' (0.1 miles) Section 5 T10S R22E (NE/4 NW/4) On-lease UTU01195, BLM surface, New 8" buried gas gathering pipeline from the edge of the pad to tie-in to the approved 16" gas pipeline to the west. Please refer to Exhibit A, Line 8.

LIQUID GATHERING

Please refer to Exhibit B and Topo D2- Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is ± 700 ' and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

±335' (0.1 miles) – Section 5 T10S R22E (NE/4 NW/4) – On-lease UTU01195, BLM surface, New 6" buried liquid gathering pipeline from the separator to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.

Surface Use Plan of Operations 3 of 5

±365' (0.1 miles) – Section 5 T10S R22E (NE/4 NW/4) – On-lease UTU01195, BLM surface, New 6" buried liquid gathering pipeline from the edge of the pad to tie-in to the approved 6" liquid pipeline to the west. Please refer to Exhibit B, Line 8.

Pipeline Gathering Construction

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

The Anadarko Completions Transportation System (ACTS) information:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Please refer to Exhibit C for ACTS Lines

E. Location and Types of Water Supply:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Water will be hauled to location over the roads marked on Maps A and B.

F. Construction Materials:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

G. Methods for Handling Waste:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Materials Management

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

H. Ancillary Facilities:

No additional ancillary facilities are planned for this location.

I. Well Site Layout:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

J. Plans for Surface Reclamation:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Interim Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

RECEIVED: February 04, 2013

Surface Use Plan of Operations 4 of 5

Final Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Measures Common to Interim and Final Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Weed Control

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Monitoring

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

K. Surface/Mineral Ownership:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

L. Other Information:

Cultural and Paleontological Resources

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Resource Reports:

A Class I literature survey report was completed on October 31, 2012 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 12-311.

A paleontological reconnaissance survey was completed October 24-26, 2012 by SWCA Environmental Consultants. For additional details please refer to report UT12-14314-194.

Biological field survey was completed October 18-November 9, 2012 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-859.

Proposed Action Annual Emissions Tables:

Please refer to the Appendix in the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Surface Use Plan of Operations 5 of 5

M. Lessee's or Operators' Representative & Certification:

Gina T. Becker Senior Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6086 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

LJ.B.L.

December 17, 2012

Date

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

February 26, 2013

Memorandum

To: Assistant Field Office Manager Minerals,

Vernal Field Office

From: Michael Coulthard, Petroleum Engineer

Subject: 2013 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2013 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 1022-5A PAD

43-047-53530 NBU 1022-5A1BS Sec 05 T10S R22E 0808 FNL 0014 FEL BHL Sec 05 T10S R22E 0100 FNL 0497 FEL 43-047-53531 NBU 1022-5A4BS Sec 05 T10S R22E 0794 FNL 0062 FEL BHL Sec 05 T10S R22E 0756 FNL 0492 FEL 43-047-53532 NBU 1022-5A1CS Sec 05 T10S R22E 0805 FNL 0024 FEL BHL Sec 05 T10S R22E 0420 FNL 0492 FEL 43-047-53589 NBU 1022-5H1CS Sec 05 T10S R22E 0802 FNL 0033 FEL BHL Sec 05 T10S R22E 1761 FNL 0492 FEL 43-047-53590 NBU 1022-5H1BS Sec 05 T10S R22E 0799 FNL 0043 FEL BHL Sec 05 T10S R22E 1426 FNL 0492 FEL 43-047-53591 NBU 1022-5A4CS Sec 05 T10S R22E 0797 FNL 0053 FEL BHL Sec 05 T10S R22E 1091 FNL 0492 FEL NBU 1022-5J PAD 43-047-53563 NBU 1022-5J1BS Sec 05 T10S R22E 2136 FSL 2386 FEL BHL Sec 05 T10S R22E 2464 FSL 1817 FEL 43-047-53564 NBU 1022-5F4CS Sec 05 T10S R22E 2115 FSL 2408 FEL BHL Sec 05 T10S R22E 2439 FNL 2143 FWL 43-047-53598 NBU 1022-5K1CS Sec 05 T10S R22E 2102 FSL 2423 FEL BHL Sec 05 T10S R22E 2246 FSL 2160 FWL 43-047-53599 NBU 1022-5K1BS Sec 05 T10S R22E 2109 FSL 2415 FEL BHL Sec 05 T10S R22E 2604 FSL 2144 FWL

RECEIVED: February 26, 2013

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 1022-5J PAD 43-047-53600 NBU 1022-5J4BS Sec 05 T10S R22E 2122 FSL 2400 FEL BHL Sec 05 T10S R22E 1765 FSL 1816 FEL 43-047-53601 NBU 1022-5J1CS Sec 05 T10S R22E 2129 FSL 2393 FEL BHL Sec 05 T10S R22E 2101 FSL 1816 FEL NBU 1022-5I3 PAD 43-047-53565 NBU 1022-5P4CS Sec 05 T10S R22E 1410 FSL 0824 FEL BHL Sec 05 T10S R22E 0205 FSL 0499 FEL 43-047-53566 NBU 1022-5P4BS Sec 05 T10S R22E 1420 FSL 0821 FEL BHL Sec 05 T10S R22E 0586 FSL 0494 FEL 43-047-53567 NBU 1022-5P1CS Sec 05 T10S R22E 1429 FSL 0818 FEL BHL Sec 05 T10S R22E 0921 FSL 0494 FEL 43-047-53568 NBU 1022-501BS Sec 05 T10S R22E 1439 FSL 0815 FEL BHL Sec 05 T10S R22E 1093 FSL 1818 FEL 43-047-53569 NBU 1022-5J4CS Sec 05 T10S R22E 1448 FSL 0812 FEL BHL Sec 05 T10S R22E 1429 FSL 1817 FEL NBU 1022-5I PAD 43-047-53570 NBU 1022-513AS Sec 05 T10S R22E 1944 FSL 0185 FEL BHL Sec 05 T10S R22E 1809 FSL 0852 FEL 43-047-53571 NBU 1022-511BS Sec 05 T10S R22E 1947 FSL 0175 FEL BHL Sec 05 T10S R22E 2543 FSL 0517 FEL 43-047-53572 NBU 1022-5H4CS Sec 05 T10S R22E 1950 FSL 0166 FEL BHL Sec 05 T10S R22E 2432 FNL 0493 FEL 43-047-53573 NBU 1022-5H4BS Sec 05 T10S R22E 1954 FSL 0156 FEL BHL Sec 05 T10S R22E 2097 FNL 0492 FEL NBU 1022-5E PAD 43-047-53575 NBU 1022-5E4CS Sec 05 T10S R22E 1568 FNL 1089 FWL BHL Sec 05 T10S R22E 2555 FNL 0846 FWL 43-047-53576 NBU 1022-5E4BS Sec 05 T10S R22E 1559 FNL 1085 FWL BHL Sec 05 T10S R22E 2150 FNL 0854 FWL 43-047-53577 NBU 1022-5E1AS Sec 05 T10S R22E 1550 FNL 1080 FWL BHL Sec 05 T10S R22E 1410 FNL 1260 FWL 43-047-53578 NBU 1022-5D2DS Sec 05 T10S R22E 1542 FNL 1075 FWL BHL Sec 05 T10S R22E 0435 FNL 0628 FWL NBU 1022-5C Pad 43-047-53579 NBU 1022-5F4BS Sec 05 T10S R22E 1261 FNL 2602 FWL BHL Sec 05 T10S R22E 2102 FNL 2143 FWL 43-047-53580 NBU 1022-5F1CS Sec 05 T10S R22E 1251 FNL 2600 FWL BHL Sec 05 T10S R22E 1766 FNL 2142 FWL 43-047-53581 NBU 1022-5C4BS Sec 05 T10S R22E 1241 FNL 2597 FWL BHL Sec 05 T10S R22E 1081 FNL 2140 FWL 43-047-53582 NBU 1022-5C1DS Sec 05 T10S R22E 1222 FNL 2593 FWL BHL Sec 05 T10S R22E 0532 FNL 2413 FWL 43-047-53583 NBU 1022-5C1BS Sec 05 T10S R22E 1232 FNL 2595 FWL BHL Sec 05 T10S R22E 0115 FNL 2150 FWL Page 2

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 1022-5B			0	٥٢	m100	D00E	1007	TNIT	1061	
43-047-53584	NBU					R22E R22E				
43-047-53585	NBU					R22E R22E				
43-047-53586	NBU					R22E R22E				
43-047-53587	NBU					R22E R22E				
43-047-53588	NBU					R22E R22E				
NBU 1022-5N										
43-047-53592	NBU					R22E R22E				
43-047-53593	NBU					R22E R22E		_		
43-047-53594	NBU					R22E R22E		_		
43-047-53595	NBU				T10S T10S		1243 1141	_		FWL FWL
43-047-53596	NBU					R22E R22E				
43-047-53597		BHL				R22E R22E				
NBU 921-21B 43-047-53604		921-21A1BS				R21E R21E				
43-047-53608	NBU					R21E R21E				
43-047-53609	NBU					R21E R21E				
43-047-53622		BHL				R21E R21E				
NBU 921-21C			_	0.4		-01-	0000		1000	
43-047-53605	NBU					R21E R21E				
43-047-53606	NBU					R21E R21E				
43-047-53607	NBU					R21E R21E				
43-047-53613	NBU					R21E R21E				

Page 3

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-21D PAD 43-047-53610 NBU 921-21D1CS Sec 21 T09S R21E 0243 FNL 1065 FWL BHL Sec 21 T09S R21E 0578 FNL 0826 FWL 43-047-53611 NBU 921-21D1BS Sec 21 T09S R21E 0240 FNL 1056 FWL BHL Sec 21 T09S R21E 0248 FNL 0826 FWL 43-047-53623 NBU 921-21D4BS Sec 21 T09S R21E 0246 FNL 1075 FWL BHL Sec 21 T09S R21E 0929 FNL 0826 FWL NBU 921-21G PAD 43-047-53624 NBU 921-21H1CS Sec 21 T09S R21E 1766 FNL 1748 FEL BHL Sec 21 T09S R21E 1743 FNL 0495 FEL 43-047-53625 NBU 921-21G4BS Sec 21 T09S R21E 1760 FNL 1768 FEL BHL Sec 21 T09S R21E 2237 FNL 1823 FEL 43-047-53626 NBU 921-21G1CS Sec 21 T09S R21E 1757 FNL 1777 FEL BHL Sec 21 T09S R21E 1906 FNL 1822 FEL 43-047-53627 NBU 921-21G1BS Sec 21 T09S R21E 1754 FNL 1787 FEL BHL Sec 21 T09S R21E 1574 FNL 1822 FEL NBU 921-21F PAD 43-047-53628 NBU 921-21F4BS Sec 21 T09S R21E 1613 FNL 2171 FWL BHL Sec 21 T09S R21E 2070 FNL 2154 FWL 43-047-53629 NBU 921-21F1CS Sec 21 T09S R21E 1612 FNL 2161 FWL BHL Sec 21 T09S R21E 1739 FNL 2153 FWL 43-047-53630 NBU 921-21F1BS Sec 21 T09S R21E 1615 FNL 2181 FWL BHL Sec 21 T09S R21E 1407 FNL 2153 FWL 43-047-53631 NBU 921-21C4CS Sec 21 T09S R21E 1616 FNL 2191 FWL BHL Sec 21 T09S R21E 1076 FNL 2153 FWL



Digitally signed by Michael L. Coulthard DN: cn=Michael L. Coulthard, o=Bureau of Land Date: 2013.02.26 08:11:16 -07'00'

bcc: File - Natural Buttes Unit Division of Oil Gas and Mining Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:2-26-13

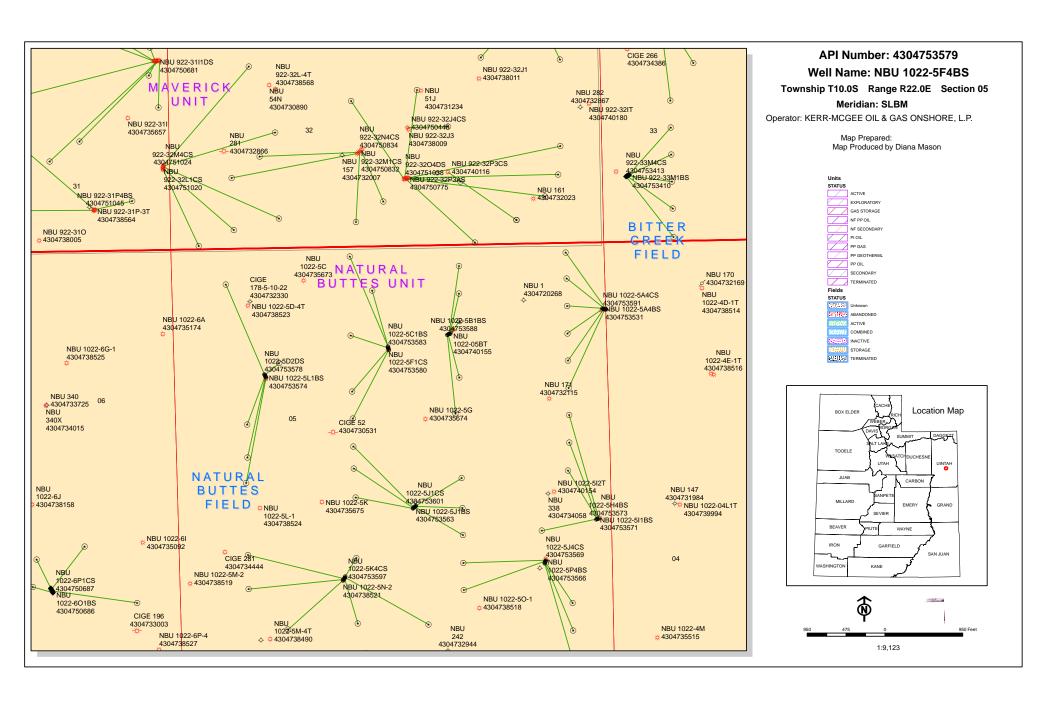
Page 4

API NUMBER	WELL NAME	SURFACE LOCATION					
43-047-53530	NBU 1022-5A1BS	Sec 05 T10S R22E 0808 FNL 0014 FEL					
43-047-53531	NBU 1022-5A4BS	Sec 05 T10S R22E 0794 FNL 0062 FEL					
43-047-53532	NBU 1022-5A1CS	Sec 05 T10S R22E 0805 FNL 0024 FEL					
43-047-53563	NBU 1022-5J1BS	Sec 05 T10S R22E 2136 FSL 2386 FEL					
43-047-53564	NBU 1022-5F4CS	Sec 05 T10S R22E 2115 FSL 2408 FEL					
43-047-53565	NBU 1022-5P4CS	Sec 05 T10S R22E 1410 FSL 0824 FEL					
43-047-53566	NBU 1022-5P4BS	Sec 05 T10S R22E 1420 FSL 0821 FEL					
43-047-53567	NBU 1022-5P1CS	Sec 05 T10S R22E 1429 FSL 0818 FEL					
43-047-53568	NBU 1022-501BS	Sec 05 T10S R22E 1439 FSL 0815 FEL					
43-047-53569	NBU 1022-5J4CS	Sec 05 T10S R22E 1448 FSL 0812 FEL					
43-047-53570	NBU 1022-5I3AS	Sec 05 T10S R22E 1944 FSL 0185 FEL					
43-047-53571	NBU 1022-5I1BS	Sec 05 T10S R22E 1947 FSL 0175 FEL					
43-047-53572	NBU 1022-5H4CS	Sec 05 T10S R22E 1950 FSL 0166 FEL					
43-047-53573	NBU 1022-5H4BS	Sec 05 T10S R22E 1954 FSL 0156 FEL					
43-047-53575	NBU 1022-5E4CS	Sec 05 T10S R22E 1568 FNL 1089 FWL					
43-047-53576	NBU 1022-5E4BS	Sec 05 T10S R22E 1559 FNL 1085 FWL					
43-047-53577	NBU 1022-5E1AS	Sec 05 T10S R22E 1550 FNL 1080 FWL					
43-047-53578	NBU 1022-5D2DS	Sec 05 T10S R22E 1542 FNL 1075 FWL					
43-047-53579	NBU 1022-5F4BS	Sec 05 T10S R22E 1261 FNL 2602 FWL					
43-047-53580	NBU 1022-5F1CS	Sec 05 T10S R22E 1251 FNL 2600 FWL					
43-047-53581	NBU 1022-5C4BS	Sec 05 T10S R22E 1241 FNL 2597 FWL					
43-047-53582	NBU 1022-5C1DS	Sec 05 T10S R22E 1222 FNL 2593 FWL					
43-047-53583	NBU 1022-5C1BS	Sec 05 T10S R22E 1232 FNL 2595 FWL					
43-047-53584	NBU 1022-5G4BS	Sec 05 T10S R22E 1087 FNL 1961 FEL					
43-047-53585	NBU 1022-5G1BS	Sec 05 T10S R22E 1084 FNL 1951 FEL					
43-047-53586	NBU 1022-5B4BS	Sec 05 T10S R22E 1075 FNL 1923 FEL					
43-047-53587	NBU 1022-5B1CS	Sec 05 T10S R22E 1078 FNL 1932 FEL					
43-047-53588	NBU 1022-5B1BS	Sec 05 T10S R22E 1081 FNL 1942 FEL					
43-047-53589	NBU 1022-5H1CS	Sec 05 T10S R22E 0802 FNL 0033 FEL					
43-047-53590	NBU 1022-5H1BS	Sec 05 T10S R22E 0799 FNL 0043 FEL					
43-047-53591	NBU 1022-5A4CS	Sec 05 T10S R22E 0797 FNL 0053 FEL					
43-047-53592	NBU 1022-503AS	Sec 05 T10S R22E 1269 FSL 2004 FWL					
43-047-53593	NBU 1022-5N1CS	Sec 05 T10S R22E 1260 FSL 1999 FWL					
43-047-53594	NBU 1022-5M4AS	Sec 05 T10S R22E 1235 FSL 1982 FWL					
43-047-53595	NBU 1022-5M1BS	Sec 05 T10S R22E 1243 FSL 1988 FWL					
43-047-53596	NBU 1022-5L4CS	Sec 05 T10S R22E 1252 FSL 1993 FWL					
43-047-53597	NBU 1022-5K4CS	Sec 05 T10S R22E 1277 FSL 2009 FWL					
43-047-53598	NBU 1022-5K1CS	Sec 05 T10S R22E 2102 FSL 2423 FEL					
43-047-53599	NBU 1022-5K1BS	Sec 05 T10S R22E 2109 FSL 2415 FEL					
43-047-53600	NBU 1022-5J4BS	Sec 05 T10S R22E 2122 FSL 2400 FEL					
43-047-53601	NBU 1022-5J1CS	Sec 05 T10S R22E 2129 FSL 2393 FEL					
43-047-53604	NBU 921-21A1BS	Sec 21 T09S R21E 0651 FNL 2056 FEL					
43-047-53605	NBU 921-21C4BS	Sec 21 T09S R21E 0978 FNL 1707 FWL					
	NBU 921-21C1CS	Sec 21 T09S R21E 0975 FNL 1698 FWL					
43-047-53607	NBU 921-21C1BS	Sec 21 T09S R21E 0972 FNL 1688 FWL					

1 OF 2 2/25/2013

API NUMBER	WELL NAME	SURFACE LOCATION			
43-047-53608	NBU 921-21B4CS	Sec 21 T09S R21E 0650 FNL 2086 FEL			
43-047-53609	NBU 921-21B1BS	Sec 21 T09S R21E 0650 FNL 2066 FEL			
43-047-53610	NBU 921-21D1CS	Sec 21 T09S R21E 0243 FNL 1065 FWL			
43-047-53611	NBU 921-21D1BS	Sec 21 T09S R21E 0240 FNL 1056 FWL			
43-047-53613	NBU 921-21D4CS	Sec 21 T09S R21E 0969 FNL 1679 FWL			
43-047-53622	NBU 921-21B4BS	Sec 21 T09S R21E 0650 FNL 2076 FEL			
43-047-53623	NBU 921-21D4BS	Sec 21 T09S R21E 0246 FNL 1075 FWL			
43-047-53624	NBU 921-21H1CS	Sec 21 T09S R21E 1766 FNL 1748 FEL			
43-047-53625	NBU 921-21G4BS	Sec 21 T09S R21E 1760 FNL 1768 FEL			
43-047-53626	NBU 921-21G1CS	Sec 21 T09S R21E 1757 FNL 1777 FEL			
43-047-53627	NBU 921-21G1BS	Sec 21 T09S R21E 1754 FNL 1787 FEL			
43-047-53628	NBU 921-21F4BS	Sec 21 T09S R21E 1613 FNL 2171 FWL			
43-047-53629	NBU 921-21F1CS	Sec 21 T09S R21E 1612 FNL 2161 FWL			
43-047-53630	NBU 921-21F1BS	Sec 21 T09S R21E 1615 FNL 2181 FWL			
43-047-53631	NBU 921-21C4CS	Sec 21 T09S R21E 1616 FNL 2191 FWL			

2 OF 2 2/25/2013



API Well Number: 43047535790000

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 2/6/2013 API NO. ASSIGNED: 43047535790000

WELL NAME: NBU 1022-5F4BS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) PHONE NUMBER: 720 929-6086

CONTACT: Gina Becker

PROPOSED LOCATION: NENW 05 100S 220E **Permit Tech Review:**

> SURFACE: 1261 FNL 2602 FWL **Engineering Review:**

> **BOTTOM:** 2102 FNL 2143 FWL **Geology Review:**

COUNTY: UINTAH

LATITUDE: 39.98177 LONGITUDE: -109.46385

UTM SURF EASTINGS: 631163.00 NORTHINGS: 4426864.00

FIELD NAME: NATURAL BUTTES LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-01195 PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 1 - Federal **COALBED METHANE: NO**

RECEIVED AND/OR REVIEWED: LOCATION AND SITING:

✓ PLAT R649-2-3.

Unit: NATURAL BUTTES Bond: FEDERAL - WYB000291

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 **Drilling Unit**

Board Cause No: Cause 173-14 Water Permit: 43-8496

Effective Date: 12/2/1999 **RDCC Review:**

Siting: Suspends General Siting **Fee Surface Agreement**

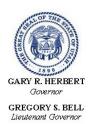
✓ Intent to Commingle R649-3-11. Directional Drill

Commingling Approved

Comments: Presite Completed

Stipulations:

3 - Commingling - ddoucet 4 - Federal Approval - dmason 15 - Directional - dmason 17 - Oil Shale 190-5(b) - dmason



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 1022-5F4BS **API Well Number:** 43047535790000

Lease Number: UTU-01195 Surface Owner: FEDERAL Approval Date: 3/12/2013

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil

shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
 - Requests to Change Plans (Form 9) due prior to implementation
 - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
 - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas Form 3160-3 (August 2007)

UNITED STATES EPARTMENT OF THE INTERIOR RECEIVED

FORM APPROVED OMB No. 1004-0136 Expires July 31, 2010

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

JAN 08 2013

5. Lease Serial No.
UTU01195

APPLICATION FOR PERMIT	TO DRILL OR REEN	BIM	6. If Indian, Allottee or	Tribe Name
1a. Type of Work: ☑ DRILL ☐ REENTER			7. If Unit or CA Agreem UTU63047A	ent, Name and No.
1b. Type of Well: ☐ Oil Well Gas Well ☐ Otl	ner 🔲 Single Zo	ne 🙀 Multiple Zone	8. Lease Name and Well NBU 1022-5F4BS	No.
2. Name of Operator Contact:	GINA T BECKER		9. API Well No.	
KERR-MCGEE OIL & GAS ONSHORMail: GINA.BI	ECKER@ANADARKO.COM	_	43 047 53	579
3a. Address P.O. BOX 173779 DENVER, CO 80202-3779	3b. Phone No. (include are Ph: 720-929-6086 Fx: 720-929-7086	a code)	10. Field and Pool, or Ex NATURAL BUTTE	ploratory
4. Location of Well (Report location clearly and in accorded	ance with any State requireme	ents.*)	11. Sec., T., R., M., or B	lk. and Survey or Area
At surface NENW Lot 3 1261FNL 260		•	Sec 5 T10S R22E	Mer SLB
At proposed prod. zone SENW 2102FNL 2143FWl	₋ 39.979484 N Lat, 109.	465559 W Lon		
14. Distance in miles and direction from nearest town or post APPROXIMATELY 48 MILES SOUTHEAST OF			12. County or Parish UINTAH	13. State UT
 Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 503 	16. No. of Acres in Lease 577.75		17. Spacing Unit dedicat	ted to this well
18. Distance from proposed location to nearest well, drilling,	19. Proposed Depth		20. BLM/BIA Bond No.	on file
completed, applied for, on this lease, ft.	10417 MD 10317 TVD		WYB000291	
21. Elevations (Show whether DF, KB, RT, GL, etc. 5184 GL	22. Approximate date work will start 06/01/2012		23. Estimated duration 60-90 DAYS	RECEIVED
	24. Attachm	ents		IUN 2 0 2013
The following, completed in accordance with the requirements of			his form:	
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Off 	em Lands, the 5. ice).	Item 20 above). Operator certification	ns unless covered by an existence or mation and/or plans as managers.	
25. Signature (Electronic Submission)	Name (Printed/Typed) GINA T BECKER F	Ph: 720-929-6086		Date 01/04/2013
Title REGULATORY ANALYST II				
Approved by (Signature)	Name (Printed/Typed)	erry Kenczka	1	JUN 1 3 2013
Title Lands & Mineral Resources	Office VERNAL	FIELD OFFICE		
Application approval does not warrant or certify the applicant ho	ds legal or equitable title to th	ose rights in the subject le	ase which would entitle the	applicant to conduct
operations thereon. Conditions of approval, if any, are attached.		CONDITIO	ONS OF APPROVAL	. ATTACHED
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n States any false, fictitious or fraudulent statements or representati		knowingly and willfully to		

Additional Operator Remarks (see next page)

Electronic Submission #176585 verified by the BLM Well Information System For KERR-MCGEE OIL & GAS ONSHORE, sent to the Vernal Committed to AFMSS for processing by ROBIN R. HANSEN on 01/14/2013 () NOTICE OF APPROVAL



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No: API No: KERR MCGEE OIL & GAS ONSHORE

170 South 500 East

NBU 1022-5F4BS

43-047-53579

Location: Lease No: Agreement: LOT 3, Sec. 5, T10S, R22E

UTU-01195

OFFICE NUMBER:

(435) 781-4400

OFFICE FAX NUMBER:

(435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)		Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 8 Well: NBU 1022-5F4BS 6/3/2013

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop
 work and contact the Authorized Officer (AO). A determination will be made by the AO as to what
 mitigation may be necessary for the discovered paleontologic material before construction can
 continue.
- Mitigation measures can be found in Appendix B, Table B-2, of the GNB ROD (BLM 2012b) under the following sections of the table:
 - o Air Quality
 - o Soils
 - o Vegetation: Sclerocactus wetlandicus
 - o Wildlife: Colorado River Fish

Where populations or individuals of Sclerocactus wetlandicus are located within 300 feet of the proposed edge of project ROWs, the following actions will be taken to minimize impacts:

- Silt fencing will be used to protect cacti that are within 300 feet and downslope or downwind of surface disturbance. Fencing is intended to prevent sedimentation or dust deposition and will be evaluated for effectiveness by a qualified botanist.
- A qualified botanist will be on site to monitor surface-disturbing activities when cacti are within 300 feet of any surface disturbance.
- Dust abatement (consisting of water only) will occur during construction where plants are closer than 300 feet from surface-disturbing activities.
- Cacti within 300 feet of proposed surface disturbance will be flagged immediately prior to surface-disturbing activities and flags will be removed immediately after surface-disturbing activities are completed. Leaving cacti flagged for as short a time as possible will minimize drawing attention to the cacti location and reduce potential for theft.
- o Pipelines will be sited to maximize distance from adjacent cacti locations.
- Project personnel associated with construction activities will be instructed to drive at a speed limit of 15 miles per hour on unpaved roads and remain in existing roadway ROWs at all times.

For permanent surface pipelines, KMG will adhere to existing cacti survey/buffer guidelines of 300 feet, or amended guidelines if developed by the BLM and USFWS. In areas where avoidance by 300 feet is not feasible and populations or individuals of *Sclerocactus wetlandicus* are within 50 feet of proposed project components, the following actions will be taken to minimize impacts:

Page 3 of 8 Well: NBU 1022-5F4BS 6/3/2013

- o Prior to construction, flag individual cactus. Once pipe installation is complete, remove the flagging.
- o Prior to construction, install protective fencing around the cacti if they are down gradient of the surface pipe. Once pipe installation is complete, remove the protective fencing.
- A qualified botanist will be present during construction to monitor surface line installation.

The following considerations are required for those wells where KMG deems completion fluid recycling is appropriate based on new well density and topography:

- Temporary lines associated with recycling of completion water will be sited in existing ROWs. The pressure in the lines is less than 50 pounds per square inch and the lines are constructed of rigid aluminum; therefore, virtually no movement will occur during operation.
- If surface water completion lines are placed within the footprint of a road disturbance where vegetation does not grow, *Sclerocactus wetlandicus* surveys will not be necessary.
- A qualified botanist will survey a 50-foot-wide corridor along roads where temporary lines are planned to ensure Sclerocactus wetlandicus is not present.
- o If cacti are present within the 50-foot-wide survey corridor and avoidance is necessary (to ensure the line is more than 50 feet away from identified cactus), the new alignment will, if possible, be such that the cacti are topographically higher than the re-aligned line so a potential spill from the line will not impact the identified cacti.
- If it is not possible to re-align the surface lines to avoid individuals or populations of the *Sclerocactus wetlandicus* that are within 50 feet of surface disturbance, the following actions will be taken to minimize impacts:
- Prior to construction, KMG will flag individual cacti. Once pipe installation is complete, remove the flagging.
- Prior to construction, KMG will install protective fencing around the cacti if they are down gradient of the surface pipe. Once pipe installation is complete, remove the protective fencing.
- A qualified botanist will be present during construction to monitor surface line installation.

Avoidance of cactus by 300 feet will take priority in the expansion of pads within the cactus core conservation areas. When the 300-foot buffer cannot be avoided in pad expansion, KMG will notify the USFWS and work with the BLM to determine pad expansion that places a priority on avoiding cactus impacts.

KMG will follow existing ROWs and/or roads in constructing new buried pipelines within the cactus core conservation areas. For instance, where a new buried pipeline is unable to follow an existing ROW and/or road and exceeds 600 feet in length, KMG will work with the USFWS and the BLM to determine a route that places a priority on avoiding cactus impacts.

Maintenance activities on pipelines within cactus core conservation areas will avoid impacts to cactus, to the extent possible.

- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent weed seed introduction.
- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established

Page 4 of 8 Well: NBU 1022-5F4BS 6/3/2013

- Noxious and invasive weeds will be controlled throughout the area of project disturbance.
- Noxious weeds will be inventoried and reported to BLM in the annual reclamation report. Where an integrated pest management program is applicable, coordination has been undertaken with the state and local management program (if existing). A copy of the pest management plan will be submitted for each project.
- A pesticide use permit (PUP) will be obtained for the project, if applicable.
- Bird exclusion netting will be installed over reserve pits containing water that are left open for more than 30 days to reduce possibility of exposure to hazardous chemicals (BLM 2012b).
- KMG will install bird-excluding devises that prevent the perching and entry of migratory birds on or into its new fired vessel exhaust stacks (BLM 2012b).
- Tree removal within pinyon-juniper habitat will occur outside of the nesting season for migratory birds (approximately 4/1 to 7/31 (BLM 2012b).
- Damage to livestock and livestock facilities would be reported as quickly as possible to the BLM and affected livestock operators. Operators would develop and employ prevention measures to avoid damaging fences, gates, and cattleguards, including upgrading cattleguard gate widths and load-bearing requirements and fencing all open pits and cellars.

If partial or complete removal of a fence cannot be avoided, the fence would be braced and tied off per the BLM guidance. Where the fence is crossed by a road, the fence would be braced and a cattleguard and gate installed per BLM guidance.

Page 5 of 8 Well: NBU 1022-5F4BS

6/3/2013

DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- Cement for the 4.5 inch casing shall be brought up to a minimum of 200 feet above the surface casing shoe.
- A CBL shall be run from TD to TOC in the Production Casing.
- Variances shall be granted as requested in the APD under Section 9 of the Drilling Program.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily
 drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order
 No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a
 test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's
 log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
 encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
 Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

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encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
 Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well by CD (compact disc).
 This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

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OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
 notified when it is placed in a producing status. Such notification will be by written communication
 and must be received in this office by not later than the fifth business day following the date on
 which the well is placed on production. The notification shall provide, as a minimum, the following
 informational items:
 - o Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

Page 8 of 8 Well: NBU 1022-5F4BS 6/3/2013

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
 Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
 future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
 BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
 hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
 be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to
 the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first.
 All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All
 product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in
 accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
 equipment shall be removed from a well to be placed in a suspended status without prior approval
 of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
 approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
 of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 20, 2014

Teena Paulo Kerr-McGee Oil & Gas Onshore, LP 1099 18th Street, Suite 600 Denver, CO 80202

Re: APDs Rescinded for Kerr-McGee O&G Onshore, L.P., Uintah County

Dear Ms. Paulo:

Enclosed find the list of APDs that you have asked to be rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded, effective February 20, 2014.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

cc: Well File

Bureau of Land Management, Vernal



40 04	
43-047-52301	NBU 1022-25D3AS
43-047-52302	NBU 1022-25E2AS
43-047-53531	NBU 1022-5A4BS
43-047-53579	NBU 1022-5F4BS
43-047-50107	NBU 921-8B4S
43-047-50109	NBU 921-8A1S
43-047-52299	NBU 1022-25F2AS
43-047-52296	NBU 1022-25C3DS
43-047-52297	NBU 1022-25C3AS
43-047-52295	NBU 1022-25C2DS
43-047-52300	NBU 1022-25D3DS
43-047-52298	NBU 1022-25D2DS
43-047-51025	NBU 921-11I

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UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

MAY 08 20:5

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

5. Lease Serial No. UTU01195

Do not use this form for proposals to drill out to mental					71001135		
Do not use this form for proposals to drill or to re-enter an Law abandoned well. Use form 3160-3 (APD) for such proposals.				6. I	6. If Indian, Allottee or Tribe Name		
				7. I	7. If Unit or CA/Agreement, Name and/or No. UTU63047A		
					ell Name and No IBU 1022-5F4B		
2. Name of Operator		JENNIFER TH	OMAS	9. A	API Well No.		
KERR MCGEE OIL & GAS OF	NSHORE-Mail: JENNIFER	R.THOMAS@ANA	ADARKO.COM	4	3-047-53579		
3a. Address P.O. BOX 173779 1099 18TH STREET, SUITE 600 DENVER, CO 80217 3b. Phone No. (include area code) Ph: 720-929-6808				10.	10. Field and Pool, or Exploratory NATURAL BUTTES		
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description	n)		11.	11. County or Parish, and State		
Sec 5 T10S R22E Mer SLB				L	JINTAH COUN	ITY, UT	
	r •						
12. CHECK APPR	ROPRIATE BOX(ES) TO	O INDICATE N	NATURE OF N	NOTICE, REPOR	RT, OR OTHE	R DATA	
TYPE OF SUBMISSION	TYPE OF ACTION						
S Notice of Intent	☐ Acidize	☐ Deepen		☐ Production (Start/Resume) ☐ Water		☐ Water Shut-Off	
☑ Notice of Intent	☐ Alter Casing	☐ Fractu	☐ Fracture Treat ☐ Reclamat			■ Well Integrity	
☐ Subsequent Report	Casing Repair	☐ New Construction☐ Plug and Abandon		■ Recomplete			
☐ Final Abandonment Notice	☐ Change Plans			☐ Temporarily	☐ Temporarily Abandon Change to Origi		
	☐ Convert to Injection	Plug E	ig Back		al		
13. Describe Proposed or Completed Ope If the proposal is to deepen directiona Attach the Bond under which the wor following completion of the involved testing has been completed. Final Ab determined that the site is ready for fi	ally or recomplete horizontally, k will be performed or provide operations. If the operation re- nandonment Notices shall be fil- nal inspection.)	give subsurface lo the Bond No. on f sults in a multiple of led only after all rec	cations and measu- ile with BLM/BIA completion or reco juirements, includ-	red and true vertical of Required subseque impletion in a new inter-	lepths of all pertir nt reports shall be terval, a Form 316 been completed,	nent markers and zones. filed within 30 days 60-4 shall be filed once and the operator has	
Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requestension to this APD for the maximum time allowed. Please contact undersigned with any questions and/or comments. Thank you.			sts an ie		1 .	FIELD OFFICE	
APD G/12/13					EIVG.	71 41-113	
			DECEME	FOEWED			
RECEI				U	ES		
JUN 15 2015						# P	
CONDITIONS OF APPROVAL ATTACHED JUN 1 5 2013				, 10	PET		
		DIV.	OF OIL, GAS	MINING	RECL.		
14. I hereby certify that the foregoing is	Electronic Submission #3 For KERR MCGE	301232 verified I	by the BLM Well	Information System to the Vernal	em		
Name (Printed/Typed) JENNIFER	Committed to AFMSS for processing In Name (Printed/Typed) JENNIFER THOMAS			GEE ON US/1 <i>2/2</i> 019 ATORY SPECIAL	=		
OLIVIANI LIV	itle REGUL	·		· · · · · · · · · · · · · · · · · · ·			

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

(Electronic Submission)

Signature

Assistant Field Manager ands & Mineral Resources JUN 0 5 2015

Conditions of approval if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title

Date

05/08/2015

VERNAL FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CONDITIONS OF APPROVAL

Kerr McGee Oil and Gas Onshore LP.

Notice of Intent APD Extension

Lease:

UTU-01195

Well:

NBU 1022-5F4BS

Location:

SENW Sec 5-T10S-R22E

An extension for the referenced APD is granted with the following conditions:

- 1. The extension and APD shall expire on 06/13/2017.
- 2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Robin L Hansen of this office at (435) 781-2777